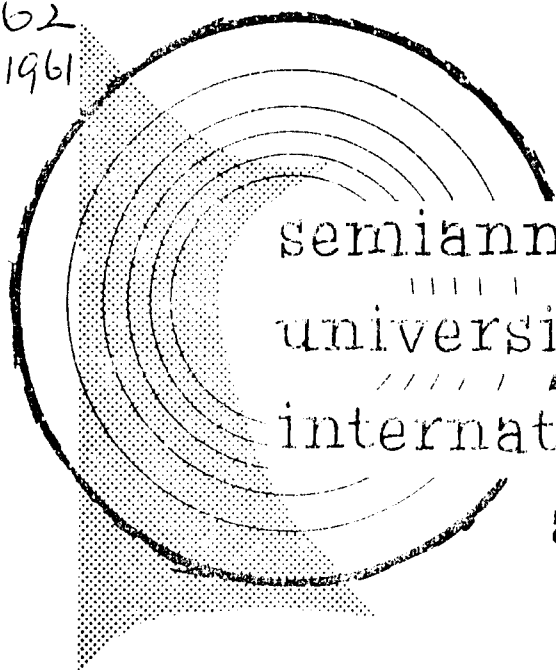


TU
378.4961
N 362
Sep 1961

PN-ARE -387



semiannual report of
university of nebraska
international cooperation
administration

NEBRASKA IN TURKEY

turkish
university
program

APRIL 1, 1961
TO SEPTEMBER 30, 1961

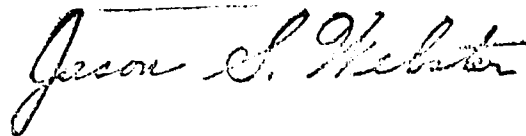
A.I.D.
Reference Center
Room 2050 NS

INDEX

University of Nebraska-ICA Contract	
Jason S. Webster, Coordinator	
SUMMARY OF CONTRACT AND AMENDMENTS	2
AMERICANS LEARN OF TURKEY by Jason S. Webster	3
TURKISH PARTICIPANTS	4
Ankara	5
Ataturk	7
PERSONNEL	
Administrative Committee	8
Home Staff	8
University of Nebraska Staff in Turkey	9
REPORT BY DR. MARVEL L. BAKER, Chief Advisor in Turkey	10
I. Personnel	10
II. Participant Programs	11
III. Equipment	17
IV. The Program at Ankara University	18
V. The Program at Ataturk University	25
VI. Administrative Comments	37
VII. Administrative Summary	45

UNIVERSITY OF NEBRASKA - ICA CONTRACT PROGRAM

In accordance with provisions of Contract No. ICA-W-610
Appendix A - Article IV, we submit herewith the semiannual progress
report covering the period April 1, 1961 to September 30, 1961.

A handwritten signature in cursive script, reading "Jason S. Webster".

Jason S. Webster
Coordinator
Univ. of Nebr. Turkish Program

UNIVERSITY OF NEBRASKA-ICA-CONTRACT

Entered into - March 28, 1955

Amendments - May 3, 1955
June 29, 1955
August 5, 1955
September 19, 1955
March 16, 1956
July 3, 1956
September 22, 1956
January 5, 1957
November 22, 1957

Superseded by New Contract, May 1958 to extend to December 31, 1960.

Amendments - 1. June 1959
2. September 1959
3. June 1960 - Extended contract to June 30, 1962.
4. (Amendment No. 4 pending)

SCOPE: Render technical advice and assistance to Turkey for the purpose of:

1. Creating a New Land-Grant-Type University at Erzurum, Turkey.
2. Training its faculties of Agriculture and supporting fields.
3. Developing and strengthening Ankara University's program in Agriculture, Home Economics and Veterinary Medicine.

Conditions Governing Operations: Services provided in Turkey are an integral part of the United States aid and will be performed under the general policy guidance of the USOM Director; the University of Nebraska will be responsible for all professional and technical details of the contract and shall keep the USOM Director currently informed of the progress of the project.

Americans Learn of Turkey

Jason S. Webster, Coordinator

One of the benefits arising from the University of Nebraska-ICA Turkish Program is the opportunity for Americans to become better acquainted with their staunch friends, the Turkish people, and to learn of their interesting culture. There are many ways through which this acquaintance is being developed.

Through the Land-Grant College Centennial

The National Centennial Committee decided to use a series of six television programs to tell the story of the work of the Land-Grant Universities. The television stations of the universities were asked to submit suggestions of programs that they could prepare which would illustrate the various activities of Land-Grant Universities. Boyd Rooney, Producer-Director of KUON-TV, submitted the idea of using the Nebraska-ICA-Turkish Program as an example of the expanding influence of American Land-Grant Universities into other parts of the world. The idea was accepted by the Centennial Committee and the University of Nebraska was allowed a grant for this purpose.

Since the University of Nebraska is planning to send Mr. George S. Round, Director of Public Relations, on an inspection trip to Turkey, Mr. Lloyd Peterson will accompany him to obtain moving pictures for the TV program. Phil Holman, Associate Experiment Station Editor, is responsible for the preparation of the script for the program.

The Land-Grant Centennial TV series will be given national coverage in April and May of 1962.

Through the Participants

The participants inform Americans of Turkey through their usual activities in connection with their training at various universities. They are invited into homes and sometimes called upon to tell about Turkey at schools and churches. They have helped the Extension workers conduct meetings. Our participants have been excellent ambassadors-of-good-will for Turkey.

Through Returned Staff Members

Staff members and their wives receive requests for programs on Turkey for years after their return to the United States. Dr. B. T. Simms is scheduled to appear on the program of the Veterinary Section of the annual meeting of Land-Grant Colleges and Universities to be held in St. Louis this fall.

These examples are indicative of the manner in which Turkey and the U.S. mutually benefit from this program.

PARTICIPANTS

To date we have had a total of 138 participants--104 Ankara and 34 Ataturk. At the present time we have 13 Ankara participants and 6 Ataturk participants in the United States under our contract program. Seven other participants are here under assistantships or financed independently.

New Arrivals During Period April 1, 1961 to September 30, 1961

Ankara - 14 new arrivals

Akpinar, Cemalettin	Karaca, Ibrahim	Oncu, Cahit
Evliya, Halid	Keskintepe, Hamza	Oztan, Yuksel
Finci, Kadri	Kural, Orhan	Senel, Servet
Gurcan, Abdullah	Mulayim, Ziya G.	Senturk, Ramazon
Isikan, Mustafa	Ogus, Nevzat	

Ataturk - 2 new arrivals

Omer Baykan
Ahmet Kurt

Departures During Period April 1, 1961 to September 30, 1961

Ankara - 8 departed

Mahmut Ayfer	Halid Evliya
Omer Bakir	Turan Gunes
Esref Deniz	Neriman Gurtanin
Zeki Doganeli	Mithat Ozsan

Ankara - 4 were transferred from ICA Sponsorship

Ali Balaban
Nezihi Ersoz
Burhan Kacar
Fahri Sayin

Ataturk - 4 departed

Osman Arikan
Lutfi Ogus
Mehmet Oner
Fahrettin Tosun

Extensions granted during period April 1, 1961 to September 30, 1961

Ankara - 1

Mustafa Ayyildiz extended under our program until June 30, 1962.

Ankara Participants in the United States Under Our Program on Sept. 30, 1961

Name	Field of Interest	Location	Date of Arrival	Termination of Program
Akpınar, Cemalettin	Poult. Phys.	Univ. of Md. College Park, Md.	Aug. 1, 1961	July 31, 1962
Ayyıldız, Mustafa	Ag. Engr.	Univ. of Calif. Davis, Calif.	Aug. 25, 1960	June 30, 1962
Balaban, Ali ¹	Ag. Engr.	Univ. of Nebr.	Sept. 16, 1959	Sept. 1, 1962
Dogan, Refika ²	Home Ec.	Univ. of Nebr.	Feb. 1, 1958	Feb. 1, 1960
Ersoz, Nezihi ³	Vet. Sci.	Mich. St. Univ. E. Lansing, Mich.	Aug. 16, 1960	Aug. 15, 1962
Erturk, Kamuran	Vet. Sci.	Ore. St. Univ. Corvallis, Ore.	March 30, 1961	March 29, 1962
Finci, Kadri	Vet. Sci.	Okla. St. Univ. Stillwater, Okla.	Sept. 5, 1961	July 4, 1962
Gurcan, Abdullah	Plant Sci.	Univ. of Nebr.	Aug. 31, 1961	Aug. 30, 1962
Gurtunca, Sukru	Pharmacology	Univ. of Ill. Urbana, Ill.	Feb. 2, 1961	Feb. 1, 1962
Isikan, Mustafa	Pl. Breed.	Univ. of Nebr.	May 31, 1961	May 30, 1962
Kacar, Burhan ⁴	Agronomy	Univ. of Nebr.	Aug. 25, 1960	Aug. 24, 1962
Karaca, Ibrahim	Pl. Protec.	Univ. of Nebr.	Sept. 7, 1961	March 6, 1962
Kendir, Saim	Cattle Br. & Genetics	Cornell Univ. & Beltsville, Md.	Jan. 20, 1960	Jan. 19, 1962
Keskin-tepe, Hamza	Vet. Bact.	Univ. of Ky. Lexington, Ky.	Aug. 28, 1961	June 27, 1962
Kural, Orhan	Ag. Ext. & Information	Univ. of Wisc. Madison, Wisc.	Aug. 28, 1961	Aug. 27, 1962
Mulayim, Z. G.	Ag. Econ.	Harvard Univ. Cambridge, Mass.	Aug. 22, 1961	Aug. 21, 1962
Ogus, Nevzat	Vet. Pharm. & Tox.	Univ. of Wisc. Madison, Wisc.	Aug. 22, 1961	June 21, 1962
Oncu, Cahit	Leather Chem.	Univ. of Nebr.	Aug. 18, 1961	Nov. 17, 1961

Ankara Participants (Continued)

Name	Field of Interest	Location	Date of Arrival	Termination of Program
Oztan, Yuksel	Landscape Architecture	Univ. of Calif. Berkeley, Calif.	June 2, 1961	June 1, 1962
Sayin, Fahri ⁵	Insect. Paras.	Univ. of Utah Logan, Utah	Aug. 25, 1960	Aug. 24, 1962
Seckin, Refet	Cereal Tech.	Univ. of Nebr.	Jan. 25, 1960	Jan. 24, 1962
Senel, Servet ⁶	An. Nutr.	Univ. of Nebr.	Aug. 31, 1961	Aug. 30, 1962
Senturk, Ramazon ⁶	Bio-Chem. & Nutr.	Univ. of Wisc. Madison, Wisc.	Aug. 25, 1961	Aug. 24, 1962
Tekeli, Sait ⁷	Vet. Path.	Univ. of Wisc. Madison, Wisc.	Jan. 20, 1960	Jan. 19, 1962

¹Ali Balaban will be under the sponsorship of the Ag. Engr. Dept., University of Nebraska, from August 1, 1961 - August 1, 1962. He will be under the Univ. of Nebr.-ICA Contract Program from Aug. 1, 1962 - Sept. 1, 1962.

²Refika Dogan is studying at the University of Nebraska and is independently financed.

³Nezihi Ersoz will be under the sponsorship of Michigan State University from August 1, 1961 - August 15, 1962.

⁴Burhan Kacar will be under the sponsorship of the Dept. of Agronomy, University of Nebraska, from six to twelve months.

⁵Fahri Sayin will be under the sponsorship of Utah State University for one year.

⁶Servet Senel and Ramazon Senturk's programs call for work leading to Ph.D. Degrees. At the end of their first year of study, the programs will be evaluated and their time extended if satisfactory progress has been made.

⁷Sait Tekeli will be under the sponsorship of the University of Wisconsin for one year.

Ataturk Participants in the United States Under Our Program on Sept. 30, 1961

<u>Name</u>	<u>Field of Interest</u>	<u>Location</u>	<u>Date of Arrival</u>	<u>Termination of Program</u>
Aksoy, Necati	Soil Sci.	Univ. of Nebr.	Jan. 27, 1961	Jan. 26, 1963
Alkan, Ziya ¹	Ag. & Civil Engr.	Univ. of Nebr.	Jan. 30, 1957	Feb. 1, 1961
Baykan, Omer ²	Soil Sci.	Univ. of Wisc. Madison, Wisc.	Sept. 7, 1961	July 1, 1962
Dogan, Kamuran	Dairy Tech.	Univ. of Nebr.	Jan. 24, 1961	Jan. 23, 1963
Firater, Nezihe	Dairy Tech.	Univ. of Nebr.	Jan. 24, 1961	Jan. 23, 1963
Gullap, Talat	Economics	Univ. of Nebr.	Jan. 27, 1961	Jan. 26, 1963
Kurt, Ahmet ²	Dairy Ind.	Univ. of Wisc. Madison, Wisc.	June 6, 1961	March 15, 1962

¹Ziya Alkan's program under the Univ. of Nebr.-ICA Contract was terminated on February 1, 1961. He has been studying at the University of Nebraska on his own. He departs for Turkey October 18, 1961.

²Omer Baykan and Ahmet Kurt were participants under our program in 1959 and received M.S. Degrees from Pennsylvania State University and the University of Wisconsin, respectively.

UNIVERSITY OF NEBRASKA-ICA CONTRACT TURKISH PROGRAM
PERSONNEL

ADMINISTRATIVE COMMITTEE

Chairman.....Dr. E. F. Frolik, Dean
College of Agriculture

Secretary.....Jason S. Webster, Coordinator
Univ. of Nebr. Turkish
Program

Members:

Albin T. Anderson
E. C. Conard
Otto G. Hoiberg
G. A. Young

HOME STAFF

Coordinator..... Jason S. Webster

Secretaries..... Frances Lawritson
Mary Peo

Finance Officer..... Ruth Swanson

Home Office: 104 Ag. Admn. Annex
College of Agriculture
University of Nebraska
Lincoln, Nebraska

PERSONNEL
UNIVERSITY OF NEBRASKA STAFF IN TURKEY

During April 1, 1961 to Sept. 30, 1961

<u>Name</u>	<u>Position</u>	<u>Period of Assignment</u>	
		<u>From</u>	<u>To</u>
ALEXANDER, Martin A.	Animal Husbandry Specialist--Ataturk Univ.	Sept. 15, 1959	Oct. 1963**
ALLEN, Harold L.	Extension and Information Specialist--Ankara Univ. Associate Chief of Staff---Appointed Nov. 1, 1959	Sept. 17, 1956	June 1963**
*AMES, Mercedes	Secretary - Ataturk Univ.	Sept. 5, 1961	Sept. 15, 1963**
BAKER, Marvel L.	Chief of Staff	Oct. 1, 1960	Oct. 8, 1962**
CARTER, Deane	Ag. Engr. Specialist and Ataturk Univ. Adviser--Appointed Nov. 10, 1960	Sept. 6, 1960	Sept. 21, 1962**
FENSKE, Leo J.	Farm Management Specialist Ataturk University	Sept. 22, 1960	Oct. 8, 1962**
*HARPER, Horace J.	Soils Specialist Ataturk University	April 20, 1961	April 27, 1963**
IESOING, Doris	Administrative Secretary Ankara University	Oct. 7, 1957	July 31, 1961
MCCROW, Evelyn	Home Economist--Ankara Univ.	Jan. 1, 1959	Feb. 16, 1963**
MCCULLOUGH, Sally	Secretary - Ankara Univ.	Nov. 29, 1960	Nov. 28, 1962**
NERVIK, Ottar	Agricultural Economist Ataturk University	Oct. 22, 1959	May 31, 1961
SIMMS, B. T.	Veterinary Adviser Ankara University	July 1, 1957	Dec. 1961
SOUCHEK, Robert A.	Secretary - Ataturk Univ.	Oct. 22, 1959	Oct. 21, 1961
*SWANSTROM, L. Wylene	Secretary - Ankara Univ.	July 5, 1961	July 18, 1963**
*VENNIX, Arthur J.	Librarian--Ataturk Univ.	June 1, 1961	Sept. 15, 1961
WELDON, Marcus D.	Soils Specialist Ataturk University	June 11, 1959	June 10, 1961
WHEELER, Ernest J.	Crops Specialist	Sept. 6, 1960	Sept. 20, 1962**
*WINTER, John M.	Botanist, Ataturk Univ.	May 22, 1961	June 3, 1963**

*Arrived in Turkey during this period.

**Or to date of termination of contract, whichever comes first.

REPORT

by

Dr. Marvel L. Baker

I.

Personnel

A. Termination of Assignment

1. Dr. Marcus D. Weldon, Professor of Soil Science, and Mrs. Weldon departed from Turkey, 2 May 1961, terminating his assignment with the Nebraska Group at Ataturk University. Dr. Weldon is returning to his position with the University of Nebraska.
2. Dr. Ottar Nervik, Professor of Agricultural Economics, departed from Turkey, 5 May 1961, terminating his assignment with the Nebraska Group at Ataturk University. Dr. Nervik planned to visit countries in Europe before returning to the United States this fall.
3. Miss Doris M. Lesoing, Administrative Secretary, departed from Turkey 23 May 1961, terminating her long-time and valued service with the Nebraska Group.
4. Dr. and Mrs. Bennett T. Simms departed from Turkey on September 14, 1961. Dr. Simms had completed more than four years of useful and satisfactory work with the Veterinary Faculty of Ankara University. During his service in Turkey he cooperated fully with other scientists and administrators interested in the study and eradication or control of animal diseases. Due to his international professional standing and his unusual personal qualities, his contacts were numerous and his influence widespread.
5. Professor Arthur J. Vennix departed from Turkey on September 13 completing about three months' work as Library Consultant at Ataturk University.

B. Incoming Personnel

1. Dr. Horace J. Harper arrived in Turkey, 27 April 1961, to replace Dr. Marcus D. Weldon as Professor of Soil Science with the Nebraska Group at Ataturk University. Mrs. Harper arrived on 3 June.
2. Dr. and Mrs. John M. Winter arrived on 3 June 1961. Dr. Winter replaced Dr. H. L. Weaver (who left Turkey in January) as Professor of Biological Sciences and Arts and Science Advisor with the Nebraska Group at Ataturk University.
3. Professor Arthur J. Vennix arrived 3 June 1961. He is serving as Library Consultant at Ataturk University for approximately three months.

4. Miss L. Wylene Swanstrom arrived in Ankara 18 July 1961. She replaced Miss Sally A. McCullough as secretary on the Faculty of Agriculture campus. Miss McCullough replaced Miss Lesoing who had departed from Turkey in May as Administrative Secretary for the University of Nebraska Group.
5. Miss Mercedes Ames arrived in Turkey September 15 to replace Robert Soucek as secretary for the Group at Ataturk University. Mr. Soucek is scheduled to depart from Turkey early in October. In addition, Miss Ames is to serve as Lecturer in English at Ataturk University, giving special attention to Assistants generally, but especially to those working with the Nebraska Group.

C. Home Leave

Professor and Mrs. M. A. Alexander left Turkey on July 8 for Home Leave. They are scheduled to return to Turkey on October 3.

II.

Participant Programs

A. Ankara University

During this period, processing of Ankara University Participants proceeded as follows:

1. Thirteen (13) Participants departed for the United States. Their names, departure dates and length of programs in the United States are:

Faculty of Agriculture

Docent Dr. Mustafa Isikan - May 31 - 1 year
 Dr. Yuksel Oztan - June 2, 1961 - 1 year
 Prof. Dr. Halid Evliya - June 17, 1961 - 3 months
 Docent Dr. Cemalettin Akpınar - July 31 - 1 year
 Prof. Dr. Cahit Oncu - August 10 - 3 months
 Dr. Assistant Ziya Gokalp Mulayim - August 12 - 1 year
 Dr. Assistant Orhan Kural - August 26 - 1 year
 Dr. Assistant Abdullah Gurcan - August 27 - 1 year

Faculty of Veterinary Science

Dr. Assistant Nevzat Ogus - August 21 - 1 year
 Dr. Assistant Hamza Keskin-tepe - August 26 - 1 year
 Assistant Ramazon Senturk - August 26 - 2 years
 Assistant Servet Senel - August 28 - 2 years
 Dr. Assistant Kadri Finci - September 4 - 1 year

2. Preparation of final work programs and other necessary forms for three (3) other Ankara University Participants continued. They are:

Dr. Assistant Orhan Alpan (Veterinary Science)
Dr. Yilmaz Tigin (Veterinary Science)
Dr. Erdogan Pekel (Agriculture)

All three are scheduled to depart for the United States in January, 1962.

3. The following Participants were scheduled to return to Turkey during the period. Some, but not all, reported to the University of Nebraska Group.

Faculty of Agriculture

Dr. Assistant Omer Bakir
Dr. Assistant Neriman Gurtanin
Dr. Assistant Mahmut Ayfer
Dr. Assistant Turan Gunes
Prof. Dr. Halid Evliya

Faculty of Veterinary Science

Dr. Assistant Esref Deniz
Dr. Assistant Zeki Doganeli

4. Extensions were granted to the following Ankara University Participants who are now studying in the United States:

Dr. Mustafa Ayyildiz, ten months additional under the Nebraska program.

Dr. Ali Balaban, one year to be supported by the Department of Agricultural Engineering of the University of Nebraska.

Dr. Burhan Kacar, from six months to one year to be financed by the Department of Agronomy, University of Nebraska.

Dr. Fahri Sayin, one year to be supported by Utah State University.

Dr. Seref Nezihi Ersoz until August 15, 1962, to be financed by Michigan State University.

The fact that Universities in the United States are willing to award Assistantships to so many of the Nebraska Participants attests to the quality of the Participants, especially when the budgetary situation at many universities is considered.

It was not possible because of budgetary limitations to grant other requested extensions although in some cases the requests were deserving.

B. Ataturk University

During this period, some, but limited, progress was made with the Participant program for Ataturk University. In order to place the entire program in perspective, the following resume, in addition to progress during the period, is submitted. They are listed by areas of work:

1. Agricultural Economics and Economics

Aras, Docent Dr. Ali (Agr. Econ.) In United States October 1955 to November 1957, approximately two years. Worked on Ataturk University program, both in Ankara and Erzurum. Then transferred to Ege University where he is Professor and Chairman of the Department.

Aksoz, Dr. Ibrahim (Agr. Econ.) In United States from January 1957 to August 1960, approximately $3\frac{1}{2}$ years. One year of this was supported by the Department of Agricultural Economics, University of Nebraska. He refused to report to Ataturk University and is employed by the Ministry of Agriculture.

Arikan, Osman (Economics) To United States December 1959; should return August 1, 1961; approximately $2\frac{1}{2}$ years.

Gullap, Assistant Talat (Economics) To United States January 1961 for approximately 2 years.

2. Agricultural Engineering

Alkan, Assistant Ziya. To United States January 1957. Completed program, February 1961 at Nebraska, receiving degree of B.Sc. in Agricultural Engineering. Total period $4\frac{1}{2}$ years. Remained until June 1961 at own expense and received degree of B.Sc. in Civil Engineering. Has not yet returned to Turkey.

Ersayan, Assistant Altan. In United States January 1959 to February 1961, approximately 2 years. Now at Ataturk University. Expected to go into military service soon.

Ertugrul, Assistant Hursit. In United States January 1959 to February 1961, approximately 2 years. Now at Ataturk University working under Professors Harper and Carter on his doctorate, with a problem in soil/moisture/plant relationships.

3. Agricultural Technology

Kurt, Assistant Ahmet (Dairy Technology) In United States May 31, 1957 to July 1959, approximately 2 years. Received M.Sc. degree from University of Wisconsin. Awarded first doctorate from Ataturk University; returned to United States June 1961 for advanced work at University of Wisconsin for 9 months.

Dogan, Kamuran (Dairy Technology) To United States January 1961 for approximately 2 years.

Firater, Nezihe (Dairy Technology) To United States January 1961 for approximately 2 years.

4. Animal Science

Ozhan, Assistant Macit. In United States May 1957 to August 1959, approximately 27 months. Received M.Sc. degree, University of Nebraska June 6, 1959. Received doctorate, Ataturk University, 1961.

Ucarci, Assistant Ferit. In United States September 1957 to October 1959, approximately 2 years. Received M.Sc. degree, University of Nebraska, July 31, 1959. Received doctorate Ataturk University, 1961.

Biyikoglu, Dr. Assistant Kemal. In United States January 1959 to January 1961, 2 years. Now at Ataturk University and should receive his promotion to Docent within a reasonable time.

Goksu, Dr. Assistant Turgut. In United States June 1958 to June 1960, two years. Should be promoted to Docent this fall.

Ipek, Assistant Haluk. In United States January 1959 to January 1961, two years. Now at Ataturk University working on his doctorate.

Karatas, Dr. Assistant Saban. In United States January 1959 to January 1961. His immediate interest is Experimental Design and Statistics. He is now at Ataturk University.

5. Biological Sciences

Yalvac, Dr. Suavi. (Zoology). In United States September 1957 to June 1959, approximately 18 months. Docent at Ataturk University.

Oner, Assistant Mehmet (Botany). To United States February 1959; should report Fall 1961, approximately 2½ years.

6. Chemistry

Cataltas, Dr. Assistant Ihsan. In United States January 1957 to July 1959, approximately 2½ years. Docent at Ataturk University.

Pekin, Dr. Assistant Burhan. In United States August 1957 to September 1959, approximately 25 months, of which three were supported by the Chemistry Department, University of Nebraska. Now a Docent at Ataturk University.

Sozmen, Dr. Mehmet. In United States August 1957 to September 1960, one month more than three years; approximately 18 months of this was supported by the Chemistry Department, University of Nebraska. It is our understanding that he is employed by one of the sugar factories.

7. Home Economics

Gorgunay, Assistant Neriman. In United States January 1959, November 1960, 1 year and 10 months. Now at Ataturk University.

8. Physics and Mathematics

Aydin, Assistant Mehmet (Physics). In United States May 1957 to January 1960, 2 years and 8 months. Awarded the M.Sc. Degree, University of Nebraska, December 18, 1959. Now working on his doctorate at Fen Faculty, Ankara, while completing his military service.

Ozbek, Haki (Mathematics) In United States under Nebraska Program June 1957 to June 1959, two years. Remained in United States upon his own initiative and was awarded degree of B.Sc. in Civil Engineering by the University of Nebraska in 1960. Whereabouts unknown.

9. Plant Science (Includes Plant Protection)

Yuksel, Dr. Assistant Hasan (Entomology) In United States January 1959 to September 1960, 18 months. Now at Ataturk University.

Tosun, Assistant Fahrettin. To United States January 1957 to return July 1961, approximately $4\frac{1}{2}$ years. Approximately one (1) year of this was supported by the Agronomy Department, University of Nebraska. Awarded his M.Sc. degree July 31, 1959 and the Ph.D. degree June 10, 1961.

Istar, Dr. Assistant Ali (Horticulture) To United States January 1959 to January 1961. Now at Ataturk University.

10. Soils Science

Ergene, Dr. Assistant Abdusselam. In United States September 1957 to July 1959, approximately 1 year and 10 months. Promoted to Docent in 1960.

Baykan, Assistant Omer. In United States January 1957 to June 1959, $2\frac{1}{2}$ years. Awarded M.Sc. degree Pennsylvania State University. Obtained his doctorate from Ataturk University; Doctor Assistant and Director of Agricultural Research Institute, Ataturk University. Dr. Omer Baykan departed for the United States on September 6, 1961. He plans to spend from 9 to 10 months at Wisconsin on soils research problems.

Berkman, Assistant Inayet. In United States January 1959 to September 1960, 1 year and 8 months. Working with Professor Harper at Ataturk University.

Ogus, Assistant Lutfi. To United States January 1959. Should report at Ataturk University this fall. Approximately $2\frac{1}{2}$ years in the United States.

Aksoy, Assistant Necati. To United States January 25, 1961, probably for 2 years.

11. Departures for the United States

Karaca, Prof. Dr. Ibrahim, departed for the United States on September 6, 1961. He expects to spend approximately six months in the United States, largely at Nebraska, working on Plant Pathology problems.

12. Prospective Participants

Kutlu Yasar Zoral and Turgut Hatunoglu, Assistants in Agricultural

Economics, terminated their work at Georgetown University and reported at Ataturk University. Here they will work during the first semester with Professor Fenske, preparatory to their departure for the United States in January, 1962.

Assistant Saip Tellioglu continued his work at Georgetown. He probably will go to the United States in the summer of 1962.

13. Return of Participants from the United States

During this period, the following Participants completed their work in the United States and left for their return to Turkey:

- a. Dr. Fahrettin Tosun who received his Ph.D. degree in Plant Breeding at Nebraska reported at Ataturk University in August. He assumed the Directorship of the Agricultural Research Institute made vacant by the departure of Dr. Omer Baykan for the United States.
- b. Ziya Alkan had not yet reported at Ataturk University. He had received a B.Sc. degree in Agricultural Engineering and one in Civil Engineering at Nebraska.
- c. Osman Arikan had not yet reported but was expected at Ataturk University before the opening of the school year. He had received a M.A. degree in Economics at the University of Nebraska.
- d. Mehmet Oner had not yet reported at Ataturk University. He had spent approximately 2-1/2 years with the Botany Department, University of Nebraska.
- e. Lutfi Ogus had not yet reported at Ataturk University. He had received a M.Sc. degree in Soils at the University of Nebraska.

To summarize the above briefly:

Of the above, one (1) departed for the United States in 1955; fourteen (14) in 1957; thirteen (13) in 1959; and five (5) in 1961. Of these 33 people, all but seven (7) have returned to Turkey.

Of these 33, one is at Ege University; one is working for the Ministry of Agriculture; one for a sugar factory, and the whereabouts of one is unknown. One is in military service but pursuing work for his doctorate.

There are a very few other possibilities by the fall of 1962.

An effort is being made to obtain additional assistants, preferably already with the doctorate. If some of these have the necessary English competence or can attain it, they may be sent to the United States by the fall of 1962.

III.

Equipment

A. Ankara University Equipment

Several additional requests for equipment and materials were received from Ankara University Faculty of Agriculture. A few of the smaller, more urgent requests were processed and submitted to the University of Nebraska for procurement. All of the larger requests and some of the smaller ones, were held pending the outcome of budget discussions. In any event, it is our thinking that aside from equipment for the new Home Economics building, only very limited expenditures for commodities for Ankara University will be made between now and the scheduled date for the termination of our program with Ankara University.

The Department of Home Economics, Faculty of Agriculture, submitted its tentative list of equipment for procurement under the Nebraska program. No official action was taken on the request during the period, but it is anticipated that orders for at least a part of the equipment will be placed by the end of the calendar year 1961.

A limited number of requests for small items was received from the Faculty of Veterinary Science of Ankara University. A few of the items were procured from the United States. In most cases, assistance was given to the staff members in obtaining the required item from other sources.

Eight (8) shipments of equipment and materials were received by Ankara University. All old shipments to Ankara University have now been cleared. All shipments to Ankara University now held in Customs were made in calendar year 1961. Documents covering eight (8) new shipments were received and processed during the period.

B. Ataturk University

Marked progress was made in clearing equipment for Ataturk University through Customs. This was due primarily to the effective work of Professor Carter and Mr. Allen and the direct intervention of the Ministry of Education.

Some of the equipment was put to work immediately in temporary laboratories and in the library. The remainder is in storage to be drawn upon as needed and as it is possible to use it. The equipment eventually will be installed in the new laboratory building now under construction on the new campus.

Shipments of commodities, purchased with Defense Support Funds were cleared through Customs and receipted for during the period.

IV.

The Program at Ankara University

A. Extension and Information Specialist

1. In addition to his work as Associate Chief Advisor referred to in other sections of this report, Mr. Allen made many other contributions to the Nebraska program and to the general educational and agricultural program in Turkey. Among these are the following:

- a. Served as a member of the Home Economics Building Committee. The construction of this building at the Faculty of Agriculture proceeded on or ahead of schedule. By the close of the period, it was apparent that additional funds would be required to complete the building so that it will be as functional as possible for the Department of Home Economics. The increased costs were due primarily to the change in building site which required construction of the building in an area recently filled in. This required additional excavating, footings, foundations and pilings and the construction of an additional sub-basement room.

Considerable committee and other work was required in connection with building progress and problems.

- b. In addition to attending regular Education and Food and Agriculture staff meetings, Mr. Allen assisted personnel from the Food and Agriculture Division/ICA and from the Ministry of Agriculture in planning suggested Extension curricula for the Ministry's Regional and Technical Schools and for training programs for the teachers of these schools.
- c. Mr. Allen made two important field trips during the period:
 - (1) He attended the Ataturk University Research Field Day on July 12.
 - (2) In August, he spent two days in Istanbul observing and studying the glass industry in Turkey. The production of canning jars for home use and of glass vials for vaccines and serums were of special interest.

The report on the findings from this trip was made available to ICA, the Ankara University Faculties, Ataturk University, CARE, and to other organizations.

2. Mr. Allen's work, related more directly to the Department of Agricultural Extension and Information, may be summarized briefly as follows:

- a. Department Chairman - Professor Dr. Cemal Calguner was named by the Faculty of Agriculture as Chairman of the Department of Extension and Information. Professor Calguner spent one year in the United States in 1955-1956 observing agricultural extension work. He has a good

understanding of extension and seems to have some fairly definite ideas regarding the function of the Department of Extension and Information at the Faculty of Agriculture.

- b. Instruction - Final examinations were given to the 1960-1961 class. Plans were made for the 1961-1962 lectures and laboratories.
- c. Staff Development - Dr. Orhan Kural departed for the United States in late August for a one-year academic program under the University of Nebraska program. Dr. Kural is enrolled for a rather heavy course load at the University of Wisconsin, and in addition, is observing as much as possible of the Wisconsin Agricultural Extension Service's work.

Assistant Ahmet Kurt reviewed considerable literature during the summer months.

Assistant Ahmet Baykurt graduated from the Turkish Army English Language Training course in June. He began his work on his doctorate during the summer, 1961.

- d. Publications - English summaries of several publications were reviewed and edited for Faculty of Agriculture staff members.
- e. Visual Aids Equipment - Seven new flannelboards and table tripods were constructed and made available to all departments of the Faculty to help meet their needs for the preparation of teaching aids.

Several new publications were added to the departmental library. For the most part, these were free publications from the United States and books purchased with Turkish lira. Teaching aids equipment continued to get more extensive use by a greater number of departments.

Several pieces of visual aids equipment were checked out for use by various departments and individuals during the summer. Mr. Allen also took a series of color and black-and-white photographs of work at the Isotope Laboratory of the Faculty of Agriculture. These will be used in teaching and for publications.

- f. Agricultural Extension Institute - A document outlining the objectives, organization, financial support, and operations of a proposed Agricultural Extension Institute which has been proposed to be established at the Faculty of Agriculture, was prepared and submitted to the Faculty of Agriculture for discussion and action. The establishment of an Institute as proposed could greatly increase the effectiveness of the Faculty in assisting farm people to increase production and raise their standard of living; and, at the same time, strengthen the cooperation between the Faculty of Agriculture and the Ministry of Agriculture, particularly in the area of Agricultural Extension work.
- g. Lecture - The lecture "How Farm People Accept New Ideas" was presented to three groups outside the Faculty of Agriculture. These included a one-half day session on the training program for provincial agricultural directors held at the Ankara Agricultural Research Institute; a special one-half day program for Devlet Su Isleri administrative per-

sonnel; and an abridged version presented at an ICA weekly staff meeting.

- h. Isotope Laboratory - The Faculty of Agriculture's Isotope Laboratory opened officially in April. A series of colored slides was taken for the laboratory showing various activities and uses of equipment. In addition, a special drive was started to obtain screw-top jars for the laboratory. Thus far, more than 1,000 have been obtained but several hundred more are needed.
- i. Conferences - Several meetings were held with ICA Agriculture Technicians and Ministry of Agriculture personnel regarding training courses for extension workers. Unfortunately, the Department staff did not learn of one training course held in Ankara for extension information workers until the course was almost completed. The program content seemed excellent, and the course could have provided an excellent opportunity for department staff members to receive valuable training. Presumably the course was sponsored by ICA and the Ministry of Agriculture.

B. Home Economics Specialist

1. Departmental Development

- a. On 11 April, the University Senate approved the uniting of the Department of Fiber Technology and Village Handicraft with the Department of Home Economics. This had been approved previously by the Council of Professors. As far as one can judge, this should ensure strong leadership for the Department during the next few years and perhaps until American-educated Turks can assume leadership for it.
- b. Much more adequate provision for office space for the Home Economics staff members has been made.
- c. Professor Morrow and the departmental staff spent considerable time and effort on the development of the new Home Economics building and on the preparation of tentative lists of laboratory and teaching equipment.
- d. A significant step toward the development of Home Economics education at the University level was indicated by the official "cornerstone ceremony" for the Home Economics Building, held 12 June 1961. His Excellency the Minister of Education, Mr. Ahmet Tahtakili; His Excellency the American Ambassador, Raymond Hare; His Excellency, the Minister of Agriculture, Professor Osman Tosun; Mr. Stuart Van Dyke and other representatives from ICA; representatives from other Ministries, Technical Vocational Schools, Turkish Women's Association, other government agencies; faculty members from various Faculties of the University of Ankara, and University of Nebraska staff members were among those attending.
- e. The Faculty of Agriculture took official action 16 June to accept

students in the Home Economics major for the fall semester, 1961.

- f. On 22 June 1961, the Home Economics curriculum was presented to the Council of Professors. A part of it was accepted and it is anticipated that the remainder can be adjusted satisfactorily.
- g. Considerable progress has been made in preparing publications for use in Home Economics extension and for teaching, both at the University and lower levels.

2. Home Economics Staff Activities

- a. Docent Rezan Sahinkaya returned 15 June from a six months study period in Germany. Dr. Assistants Kundak and Erkut have worked on translations of their Master's theses to Turkish for publication in Turkey. Later they will summarize and translate their Doctors' theses for publication.
- b. Assistant Sevim Guney completed her thesis reporting her research work for the doctorate. It is expected that this will be presented to the Council of Professors in October.
- c. A trip was made to the Kizilcahaman area where Dr. Assistant Kundak and Assistant Guney collected research data. It was necessary to check some of the data. The trip provided Professor Esberk, Chairman of the Home Economics Department and Professor Necmi Sonmez, National Chairman in Housing, an opportunity to become acquainted with some of the acute village housing problems.
- d. Docent Dr. Rezan Sahinkaya completed research on "Infant Mortality in the Hatay Area." Professor Morrow assisted her with the English summary.
- e. Professor Morrow helped four Assistants from other departments with English summaries of research publications.
- f. The department assisted with a review of "Turkish Nutrition Survey of Armed Forces" and with formulating recommendations for further research in nutrition.

3. Conferences

- a. Regular weekly Home Economics staff meetings are held. In addition, special staff meetings have been held to plan and draft the curriculum. Considerable time has been spent in developing a list of equipment needs, including visits to local markets. The staff members are anxious to develop laboratories as workshops adapted to the needs of Turkey rather than as a display of America's deluxe equipment. Weekly meetings of the Council of Professors and three General Assembly meetings were attended.
- b. Several special meetings with the architects and staff members were held to discuss problems concerning the building.

- c. Two conferences on "Rehabilitation and Settlement" were attended. The first conference included representatives from several of the Ministries, ICA, Middle East University and from Agriculture and Home Economics, Ankara University. The first major problem given to the group to consider was the moving of the entire village of Deliller with selected members of the committee present. Homes were visited. A demonstration of making soil blocks which will be used in the construction was also observed.
- d. Professor Morrow and Dr. Kundak assisted in the planning and conduct of a short course for the Home Economics teachers from the Agricultural Technical Schools, held in Ankara July 24-29, 1961.
- e. The Home Economics staff assisted with a Home Economics short course for Home Agents held in Ankara. Instruction was given to two groups, from August 21-26 and from August 28-September 2.
- f. The departmental staff assisted the Director of Agricultural Technical Schools in planning a curriculum for extension work at these schools. An Agenda for a three-day Seminar at each of the Agricultural Technical Schools for the Home Economics Teachers also was planned.
- g. Work was continued with the program for Deliller village families.
- h. A visit was made to the village of Akdogan to explore the possibility of setting up a field laboratory for Home Economists.

4. Turkish Women's Association

A new Turkish Woman's Association has been established in Turkey. Dr. Erkut and Dr. Kundak are charter members. Professor Morrow has attended three meetings, advising the Association upon organization.

5. Other Activities

- a. Assistance was given Yildiz Gungen Technical Teacher training schools with material on "Consumer Education."
- b. A conference was held with Mrs. M. Rivkin of ICA on the orientation program. Dr. Kundak was selected to present one section of an afternoon program on the topic "Village Life in Turkey."
- c. Conferences were held with Mrs. Ruth White about the translation of her book on Foods and Nutrition. With minor adaptations, the book seems suitable for use as a textbook. In addition, a number of textbooks have been reviewed as possibilities for translation. As soon as possible, textbooks by the department will be developed.
- d. Professor Morrow attended a meeting of the Provincial Agricultural Directors on "Farm Family Approach."

- e. In addition to the above, Professor Morrow and members of the departmental staff have worked with representatives from numerous agencies such as ICA, FAO, the Ministry of Agriculture and others on various Home Economics problems.
- f. Participated with representatives of the Turkish-American Women's Association in two meetings to assist in planning a program of work for the Group in assisting village families.
- g. Toured the terracing project in the Golbasi area in company with Dean Akman, Professors N. Ozbek, Orman and Sonmez. They also inspected the soil block house built for testing purposes.

C. Veterinary Science Specialist

1. Course Work

Dr. Simms, the Specialist in Veterinary Science, with Dr. Ozcan conducted two courses during spring semester, one a two-hour clinic for sophomores and one a two-hour clinic for juniors. Approximately 80 percent of time was devoted to diseases of ruminants; the remainder to diseases of horses.

Continued emphasis was placed on student participation. Students took an active part in diagnosing and treating diseases and were given experience in techniques used by veterinarians in doing field work. Emphasis was put on knowing the normal animal in order to identify the abnormal.

Students in both classes have been shown the work underway with giant liver flukes. The objectives of the project, its different phases, methods of keeping records, and day by day activities, have been discussed with them or demonstrated to them.

2. Collection of Materials and Specimens

This is time-consuming work but worthwhile. Students who see the clinical symptoms of para-tuberculosis, observe the results of testing the diseased animals, study the lesions as found upon autopsy and compare the affected intestines with normal ones, tend to develop a clear understanding of the relation of pathological changes to clinical symptoms.

3. Photographic Collection

This was a continuing activity. The collection of colored transparencies, although quite incomplete, includes more than 200 slides depicting some of the more important diseases to be seen in Turkey. These are a significant aid to the teaching aids of the Department of Internal Medicine.

4. Research

Funds for three (3) research projects, requested from the United States Department of Agriculture under Public Law 480 became available just before the beginning of this period.

With funds available, the time devoted to research with giant liver flukes (*Fasciola gigantica*) has been increased greatly. Three buffalo, three young cattle, and more than 80 sheep are in use in these studies. Colonies of snails collected from six different locations in Turkey and identified as *Lymnae auricularia* are maintained. Five of these have been found to be satisfactory hosts for this fluke. Data are being obtained on (1) the relation of temperature to the time necessary for fluke eggs to hatch and for flukes to complete their development in snails, (2) the number of young flukes emerging from a single snail, (3) techniques for collecting, keeping and administering these parasites, (4) symptoms of infection with this parasite (diarrhea, a symptom described as occurring in most infected animals) has never occurred in any of the sheep and, (5) the efficacy of treatment with three different drugs.

A short report on the treatment of rabbits artificially infected with the common liver fluke was published this period with Dr. Guralp as senior author.

5. Cooperation With the Director of Veterinary Services, Ministry of Agriculture

Dr. Simms continued his work with the Director and his staff. Since the arrival of Dr. Houlton of FAO in Turkey in January, he has been the active advisor of the Ministry on problems concerning horse sickness but the Director continues to consult Dr. Simms on other problems.

White Muscle disease in lambs occurred in Turkey again this year. It occurred in at least three villages within 25 miles of Ankara. Two of these were visited with veterinarians from both the Veterinary Faculty and the Ministry. All told, about 30-35 affected lambs were seen and treated with sodium selenite injected subcutaneously. This drug is not available in Turkey but, anticipating the reoccurrence of the disease this spring, the drug was purchased in Paris last January.

Results of treatment seemed satisfactory but it was not possible to leave controls for comparison. Owners were highly pleased. In their opinion, many lambs would have died had they not been treated.

In both villages, owners stated that the disease has occurred for at least five or six years. One man associated the disease with the increase in wheat acreage. According to him, the disease appeared soon after they diverted much of their best grazing land to cultivation.

The recent conference on emerging diseases was attended by Dr. Simms as Advisor to the Turkish delegation. About 35 countries were represented. Discussions of some of the diseases were excellent.

6. Assistance with Manuscripts

Dr. Simms continued this time-consuming but worthwhile activity. He continued to enjoy close working conditions with Dr. Yalki and his staff and with the Faculty generally.

7. Dr. B. F. Simms completed his work in Turkey during this period.

V.

The Program at Ataturk University

Teaching

Final examinations were completed during the first week of July and the opening of the University is scheduled for October 9, 1961.

B. Administration

No progress was made in resolving administrative problems. Rector Baykal, Dean Ozel and Dean Ulkumen were all absent for prolonged periods. At times, there was no Turk of senior standing present. With the absence of key personnel, there was little opportunity to develop policies, programs or plans for the future.

C. Buildings

Considerable progress was made on the housing units at the new campus. One 24-unit apartment was nearly completed. However, failure to make the necessary advance planning for providing utilities seems to preclude the use of the building this winter.

It is estimated that by the summer or fall of 1962 the faculty housing units should be finished. The laboratory building, capable of housing all academic work for a time should be completed by the fall of 1962. It is possible that the Social Science or classroom building and the student dormitory can be completed by the fall of 1962 if a major effort to do so is made.

All of the above estimates are predicated on the assumption that consistent work will be done on the buildings.

Due to the failure to complete some of the housing units and at least a part of the laboratory by October 1, 1961, the operation of the University for the current year will be handicapped greatly. Laboratory, classroom, library and office space will be inadequate. Of probably even more importance, the University must cope with grossly inadequate housing for its staff for another year.

D. Agricultural Research

An active program of research was developed and conducted with the assistance of Turkish Docents and Assistants.

The research work provided the basis for a successful Field Day program presented at the University Farm on July 12, 1961. About 40 village leaders and an equal number of editors, businessmen and representatives of various government agencies, including the Governor of Erzurum, attended.

The Field Day program was planned and conducted largely by the young Turkish members of the staff and included a tour with stops to view and to participate in discussions of work with animals, poultry, vegetable crops, hay and grasses, field crops, soils and plant diseases.

An immediate result of the Field Day was a program initiated by the Erzurum Director of Agriculture for some 400 enlisted men from the Third Army. They were given a program quite similar to that given on the Field Day itself.

Miscellaneous developments of possible significance to future research include tests on irrigation wells, an increase in the dairy herd by 25 cows, the development of an excellent poultry flock, the analysis of a large number of soil samples, the beginning of construction on a shed for sheep experiments, the letting of contracts for beef cattle and sheep headquarters and for a dairy technology laboratory. Also, a contract for the construction of buildings for the Faculty of Agriculture apparently was let during the period although we were not advised of it at the time.

E. Elazig Land

The University controls a considerable area of land at Elazig. This was visited during the period by Professors Carter, Fenske, Harper and Wheeler with Turkish staff members.

It was tentatively decided:

1. To release some land in the city of Elazig and to construct a headquarters unit and residence on other land in Elazig.
2. To develop an area east of Elazig largely for research.
3. To keep the area west of Elazig and to develop it as a research and demonstration farm.
4. To operate the remainder of the land for commercial production.

Much planning needs to be done and many details worked out before the Elazig farm becomes an integral part of a well-planned, well-conducted and well-integrated part of an effective research and demonstration unit of Ataturk University.

F. Agricultural Extension

Progress was made on developing plans for an Agricultural Extension Institute. It is hoped that these may be formally adopted within the near future.

Cooperation with the Ministry of Agriculture at the local level continued.

G. Academic Progress

A decision was reached in August to admit a total of 100 freshmen students to four majors in Agriculture and a maximum of 80 in Letters and Science. Entrance examinations were set for October 2, 3 and 4, and October 9 set as the

opening date for the University. During the summer, programs were developed for student groups in each class and major. Some additional assistants were obtained; however, the teacher situation in some areas remained critical.

H. Library

Marked progress was made in the library program which had been almost inoperative for practically a year. Professor Arthur J. Vennix served as consultant for part of the period. He worked with the available staff, prepared a manual for operations, and aided in getting the catalog files organized and the library on an operative basis. Professor Vennix prepared a three-part report: (1) a progress report, (2) a staffing plan proposal, and (3) an operations manual.

I. General Administrative

In addition to his responsibilities in connection with the Agricultural Engineering program, Professor Deane G. Carter also carries the immediate administrative responsibilities for the Nebraska Group at Ataturk University. Besides the routine administrative tasks incident to the position, the following activities are listed:

1. Besides visits by Professor Baker and Allen from Ankara, visitors included Dr. Douglas S. Ward from Education/ICA and Mrs. Ward, Mr. Earle Balch (USIS), Miss Anne Davis from the American Library, two Assistant Secretaries from the United States Embassy in Moscow, two FAO Specialists in Water Resources, Gordon R. Schlubatis, the Agricultural Attache, and Mrs. Schlubatis, Dean and Mrs. Walsh of Roberts College, two librarians from the United Nations, and the Minister of Education and Public Works.
2. It was due in large measure to Professor Carter's untiring efforts and work that the commodities purchased under Defense Support Funds and the records pertaining to them were in condition and that they were sorted and in order for clearance when Turkish Customs officials were made available. Professor Carter also worked with these officials in clearing the commodities.
3. Professor Carter spent a large amount of time in organizing "major" programs, curricula, 1961-62 schedules, research project outlines, in the preparation of the Extension Institute proposal, in developing proposals for graduate work, in developing proposals for the University stores procedures, on proposals for Elazig land use, and Faculty of Agriculture regulations.

Professor Carter also spent considerable time and effort in trying to expedite building progress, and in advising on buildings for the University land. Unfortunately, some of his advice on farm buildings was unheeded to the detriment of the buildings and with resulting unnecessary cost. Professor Carter also is Chairman of a "space use" committee appointed by Acting Rector Ozel.

- J. A summary of the work and activities of the Nebraska staff in relation to their activities by departments follows:

1. Agricultural Economics

The work in Agricultural Economics was directed by Professors Leo J. Fenske and Ottar Nervik. As already indicated Professor Nervik, at his own request, left Turkey on 5 May, before the end of the semester.

The unfinished work in Farm Credit from the first semester was completed with the help of Dr. Mulayim from the Department of Agricultural Economics, Ankara University. He also assisted with the course in Farm Appraisal. Docent Hic from Istanbul University taught two courses in General Economics. A course in Rural Sociology was given to 105 Agricultural Economics students with the help of Assistant Orhan Turkdogan.

Professor Fenske made 11 trips to nearby villages in order to obtain data on Farm Management and sociological information. Assistant Turkdogan accompanied him on these trips.

Visits were made to sugar factories at Elazig, Erzincan, Erzurum and Malatya. Preliminary data on the sugar industry in Eastern Turkey were obtained.

In company with Professor Alexander, a trip was made to Igdir and Agri to observe livestock production practices.

Five days were spent in the Kars area studying farming practices in three villages. Again, Assistant Turkdogan accompanied Professor Fenske.

Professor Fenske gave assistance and guidance to Orhan Turkdogan, Sociology Assistant, on his village study in the Kars area. Mr. Turkdogan should receive his doctorate this fall.

One research project has been submitted to the Research Institute. This study is designed to provide basic farm management data on power use, input-output data for the major crops, and seasonal distribution of labor.

Field work was started on a power-use survey in Erzurum Vilayet. Twenty-five villages were visited during the period and seventy-five individual farm surveys completed. The work was done with two students because no assistants were available. The purpose of this study is to provide basic farm management data for classroom work and for farm planning. The project will be continued.

Tabulations were made on land use, crop production, livestock numbers, and other important agricultural data for Turkey's nine agricultural regions from 1946 to date. The changes that have taken place in agriculture are being studied.

The following Assistants are now listed in Agricultural Economics and in Economics:

Osman Arikan returned from the United States (date unknown) where he received his M.A. in Economics at the University of Nebraska.

Talat Gullap -- Assistant in Economics. Has been in the United States since January, 1961.

Turgut Hatunoglu is tentatively scheduled to go to the United States in January, 1962.

Ergun Kip reported to Ataturk University on August 15. He had been employed previously by the Ministry of Education at Erzincan.

Abdulkaki Pirimiglu has successfully passed his examinations for an assistantship and it is assumed that his appointment will soon be made. He is interested in Marketing.

There is also one assistant in Sociology. Some additional assistants should be obtained for both Economics and Sociology.

2. Agricultural Engineering

It is assumed that the Agricultural Engineering Department will be developed as a "service department" because of the lack of an engineering faculty to provide the necessary professional courses. The name of the department also needs consideration because of the presently accepted usage of the term "Agricultural Engineer" in Turkey.

Plans for the school year 1961-62 call for courses in Kultur Teknik, Farm Buildings and Farm Irrigation. The department will be handicapped until provisions for laboratory work are made.

Although the teaching program will consist of service courses rather than major courses, it is expected that the department will participate fully in the work of the Agricultural Research Institute and of the Agricultural Extension Institute.

Assistants in Agricultural Engineering include the following:

Dr. Ali Ozgendiz, recently returned from Germany; Specialist in Irrigation and related work.

Battal Kushan spent 1960-61 at Istanbul Technical University. Has had experience in Germany in tractor factory.

Hursit Ertugrul has had two years experience in the United States but failed to take courses in Agricultural Engineering or in Irrigation. His principal interest is in Soils. He can remain in Agricultural Engineering and develop the water application phases. He is the only English-speaking assistant presently available.

Altan Ersayan has had two years experience in the United States. Educated as a Mechanical Engineer at Istanbul Technical University -- may be useful in the power and machinery program. He is now in the Turkish Army. He speaks English.

Ziya Alkan was in the United States for about 4-1/2 years and has B.Sc. degrees in both Agricultural Engineering and in Civil Engineering. He left the United States September 24.

Hamza Dincer is now in Austria.

Nevzet Sisman is a graduate in Agriculture from Ankara University. He has not had foreign experience. His principal interest is in surveying, drafting and buildings. During the past period, he made a comprehensive survey of farm and village buildings. He obtained photographs of many structures and made diagrams of the plan and construction. Data included age, materials, sizes, capacity, and other pertinent data for fairly complete analysis and report. The survey report will constitute the introductory part of a doctor's thesis. Other parts will include study of concrete, stone and soil blocks.

3. Animal Science

Seven members of the departmental staff taught courses during the second semester of the year just closed, under the direction of Prof. Alexander. Two of the seven taught courses in English and Mathematics. Courses for the first and second semesters of the coming year have been assigned the various staff members.

The three cattle experiments involving winter nutrition studies were completed and the cattle put on pasture for grazing studies during the summer. Additional village-wintered calves and yearlings were added to the experiments to obtain more information on the effect of winter rations on pasture gains.

The ewes at the station were machine-shorn, a new method for Eastern Turkey. The fleece of each sheep was typed so that the ewes may be grouped into similar groups for a breeding research program.

Plans have been approved for a cattle barn and for a sheep barn. Also a sheep shed which will eventually become a machine shed has been planned. The general location for the buildings has been decided upon and a general allocation of land for livestock work has been made.

Four rams from Karacabey were purchased and two from Eregli are under negotiation. These are to be used in flock improvement work. It is hoped that 100 ewes may be obtained from Eregli by this fall. Five Brown Swiss females and one (1) bull were bought from the herd at Eskisehir and added to the milking herd which will be increased further by the purchase of native cows. The eight Arabian mares which are used in connection with the livestock work, produced six excellent foals.

Professor Alexander was absent on home leave for much of the period. Work with cattle, sheep and poultry was carried forward by the assistants in this department. This department is relatively well situation as far as assistants are concerned. Assistants are:

Dr. Turgut Goksu, Dr. Saban Karatas, Dr. Macit Ozhan, Dr. Ferit Ucarci, Dr. Kemal Biyikoglu and Haluk Ipek, all of whom have had experience in the United States.

In addition, there is Dr. Saip Tellioglu now attending Georgetown University English classes. Assistant Fuat Balci in this department is responsible for apiculture.

4. Biological Sciences

Professor John M. Winter arrived in Turkey on June 3, 1961.

Dr. Winter is making an extensive taxonomic survey of Eastern Turkey, collecting plant specimens and material for laboratory and demonstration purposes in class work during the coming year.

These collections also are intended to form the nucleus of a collection of named specimens for the Herbarium of the Botany Department of Ataturk University. Duplicate specimens, intended for the National Herbarium at Washington, also were collected.

Despite Dr. Winter's late arrival and the unusually dry season at Erzurum, he collected and prepared for mounting four hundred separate collections in triplicate.

In September, Dr. Winter spent some time at the Botanical Institute of Ankara University. With the assistance of staff members there, especially Docent Dr. Kamil Karamanoglu, 85 specimens were identified. Others require further study. Among the plants was Potentilla fruticosa, common in the Rocky Mountain region of the western United States. It was not in the herbarium of Ankara University but had been listed (1867. Boissier, Ed. Flora Orientalis, etc., 1867-1887) as growing in the Erzurum region.

At the end of the period, the situation for the coming semester as far as offering instruction in Botany was concerned was uncertain.

No provision had been made by Ataturk University for an assistant for Dr. Winter although Mehmet Oner, who had spent approximately 2-1/2 years in the United States, reportedly was in Turkey. Neither had any provisions been made for a laboratory room, equipment and supplies necessary for satisfactory class work.

Assistant Mehmet Oner is the only assistant in Botany. Additional assistants in Botany and other areas of Biological Science should be obtained.

5. Crops Science

Professor Ernest J. Wheeler, with three assistants, gave top priority to teaching responsibilities for the first part of this period. A total of 178 students were involved. In addition to classroom instruction, two field trips were made.

Three assistants were busy with class work the first part of the period. One of them was assigned the extra duty of supervising the apiary consisting of approximately 30 hives of bees. Two of the three began work on doctorate problems.

One assistant with his major interest in Horticulture returned from the United States and probably will be given responsibility for two courses in horticultural crops. He also should be useful in planning and conducting research in fruit and vegetable crops. It is believed that strawberries and certain vegetable crops offer opportunities for development at Erzurum.

Plants were made for teaching the first semester classes for 1961-62, including a course in Pasture and Range Management. The department is fortunate in having Dr. Assistant Fahrettin Tosun, returned recently from Nebraska with a Ph.D. degree, who will assume major responsibility for the course. A large amount of forage and seed material for class use was collected during the summer.

In research, the stubble mulch experiment, comparing close drill seeding with row spacing spring wheat gave striking results. The row drilling, although seeded at the rate of two bushels per acre out yielded the solid drill planting which was seeded at the rate of three bushels per acre. A similar experiment with winter wheat is to be seeded in the fall of 1961.

The date of planting experiment with three varieties of sweet corn produced valuable information as well as excellent sweet corn.

The tomato variety trial with early tomatoes from the northern States produced ripe tomatoes which may be the first ripe tomatoes produced in Erzurum.

The Great Lakes head lettuce produced excellent quality. The head lettuce promises to be a new and profitable crop, producing over a two-months period or longer.

An exhibit of sweet corn, tomatoes and head lettuce was placed in one of the local shops and attracted much attention. The local Director of Agriculture asked that seed of the early tomatoes be saved for distribution to farmers.

Grass and legume seeds were produced for 50 acres of pasture seeding next year.

Assistants in this department are Dr. Fahrettin Tosun and Dr. Ali Istar, both of whom are returned Participants, Assistant Sabahattin Senol and Ishan Ergin. It is important that other assistants be obtained for Crops Science.

One extensive field trip was made to Trabzon and vicinity to investigate a source of seed potatoes for use in experiments and general field planting on the farm. Five tons of seed potatoes were bought later for the farm.

Contact was made whereby five tons of ammonium sulfate was purchased by the farm at a saving of approximately 25 percent. Hazelnut, tobacco and early spring vegetable crops production were observed.

A one-day trip was made to Erzincan to visit the experiment station for procurement of seeds of many grass plots for experiments. A ceramic dealer was contacted and clay pots were ordered for use in experiments in the University greenhouse.

At least four one-half day trips were made to villages in Erzurum to purchase varieties of potatoes grown by farmers. These varieties are in a uniform potato variety yield test with others from different sections of Turkey making a total of 18 varieties. Many of these varieties had their origin in Germany and France.

6. Library

Professor Arthur J. Vennix from the University of Nebraska arrived June 3, for an assignment of approximately three months as Library Consultant.

The library operated under great handicaps during the past semester and year. During the period, Miss Musseref Aysay was employed and brought some experience, which had been lacking, to the library.

Five members of the Library staff were trained to catalog books by the simplified method established for Ataturk Library. The entire collection of 15,000 books in the storage areas was sorted by language and arranged alphabetically by author. The Library supplies and equipment were released from Customs. An entirely new manual of technical services procedures was devised and written. Recommendations were drafted for a Library Committee. Recommendations were drafted for a staffing plan. More than 1,000 volumes were catalogued and placed in the reading room of the Library and a program for continuous cataloguing was firmly established. Book selection equipment from the United States, Great Britain, France and Germany was purchased.

7. Soils Science

Professor Horace J. Harper arrived in Turkey April 27 and in Erzurum on May 8, 1961 to replace Professor Marcus D. Weldon as Soils Science Specialist.

There was no course in soils offered during the spring semester.

Numerous experiments were conducted during the summer, including nitrogen and phosphorus fertilizer trials with sweet corn; potato trials on mineral soils; variable water level trials on peat soil, and fertilizer trials with sugar beets. They were:

- a. Potatoes on peat soil -- several hundred acres of peat soil lie along the Karasu canal on the north side of Ataturk University farm. This land was not cultivated in 1960. Barley and sugar beets were planted on about 500 acres in 1961. A part of the field was selected for a

fertilizer study with potatoes on May 10, 1961. The area was leveled, the phosphate fertilizer was applied, and the potatoes were planted on May 12, 1961. Twenty-eight plots 6.10 meters in size were used. Variable applications of superphosphate, ammonium sulfate and sulfate of potash were made in different combinations. Sprinkler heads were ordered to permit even distribution of water. An attempt to row irrigate proved unsatisfactory. Raising the level of the water table to provide subirrigation may provide a satisfactory method of watering a potato crop on this land.

- b. Fertilizer studies with sugar beets -- This study, begun in 1960, was continued. The study as modified involves a study of rates of nitrogen fertilization with a constant rate of application of superphosphate since the soil is high in exchangeable potassium. Nitrogen rates used were 0, 4, 8, 12 and 16 kg. per donem. If an adequate supply of water can be provided for the farm in 1962, this experiment will be included with other rotation and soil fertility experiments that will be planned for that area in 1962.
- c. Potatoes in mineral soil -- A fertilizer experiment with potatoes on a stony loam soil, which is similar to a large area of slope alluvium found in the Karasu valley, was started on May 17. Twelve treatments are replicated four times with plots 5 rows wide and 10 meters long. The rows are 80 cm. apart. The rates of nitrogen, phosphoric acid and potash applications were 4 and 8 kp. per donem. Superphosphate was applied on 8 plots alone.
- d. Sweet corn on mineral soil -- a fertility study on sweet corn production was located on soil similar to that used in the fertilizer study with potatoes. Nitrogen appears to be the limiting factor for sweet corn production on this type of soil. Applications of 6 and 12 kg. of N and 6 kg. of Phosphoric acid per donem were applied. Four plots received no superphosphate.
- e. Soil fertility studies with millet -- German millet is a short season forage crop which may have value in the Erzurum area. Two strains obtained from the U.S.D.A. were planted in a replicated soil fertility test in which the rate of nitrogen was 0, 6, 9 and 12 kg. per donem, with superphosphate applied at the rate of 6 kg. per donem.
- f. The relationship of water table level to crop production on peat soil -- The Hara Su Canal is about 3 meters deep. The water table level under the peat near this canal was about 130 cm. in early May, 1961. Studies in Western Europe and the United States indicate that a water table of 55 to 65 cm. is most favorable for subirrigation of annual crops. Grasses grow better when the water is at a higher level, and the peat subsidence is decreased. Four plots, four meters by 16 meters, were prepared by removing the surface soil and lowering plots 2, 3 and 4 so that the surface elevation of these plots would be 25, 50 and 75 cm. below the surface of plot No. 1 after 15 cm. of surface soil had been returned to all of them. Fifteen crops were planted in duplicate on each of these plots. Uniform fertilizer treatments of ammonium sulfate, superphosphate and sulfate of potash were applied. Rate of plant

growth and yield will be obtained as measures of the relative effect of subirrigation on plant development where the crop is planted at different distances above the water table.

- g. Soils study in the Black Sea area -- A trip was made to the Black Sea coast May 30 to June 6 to study soil problems and cropping systems in that area. Soil and rock samples were collected and one soil monolith was obtained. A very good soil fertilizer experiment was observed on the tea research station near Rize. The Director of the filbert research station at Giresun requested that a plan for a fertilizer experiment on this crop be prepared for use on that station. A large acreage of corn is planted in small fields on the Black Sea Coast. Compost seems to be the principal method of soil improvements. Twenty to thirty bushel yields are obtained under a climatic environment that would produce 75 to 80 bushels per acre if plant nutrients were not a limiting factor.

Professor Harper was accompanied by Dr. Assistant Omer Baykan and Assistant Nazmi Oruc on this trip.

- h. Soils study in the Kars area -- a trip was made to Kars from June 20 to 30 to study the black soils in this vilayet. A hydromorphic soil area near Gole was examined and a study of a forest soil made near Sarikarmis. Professor Harper was accompanied by Dr. Assistant Omer Baykan and Assistants Nazmi Oruc and Inayet Berkman.

Five new projects are in various stages of planning and execution:

- a. Effect of water conservation, replanting and fertilization on the improvement of native rangeland and in establishing pastures on cultivated land. Seven 30-acre pastures were selected for this study. Four pastures were on native rangeland, and three were on an adjacent cultivated area. This is cooperative with Animal and Crops Science.
- b. Clay mineral content of soils in eastern Turkey. Soil profile samples were collected and sent to the University of Wisconsin where Dr. Baykan will analyze them in 1961-62.
- c. A physical and chemical study of soils in eastern Turkey. Plans have been made to study one vilayet each year. Forty-five soil samples have been collected over a wide area to date and some analyses made on them.
- d. Nutrient deficiency studies on soils in eastern Turkey. No work will be done on this study until pots and a caged area can be provided and soil samples collected. This project will provide excellent data to aid in the standardization of soil nutrient availability tests by chemical methods.
- e. A study of the physical and chemical nature of soils in the Sarikamis forest. Only one soil profile has been collected from this area. This soil was much lower in clay content than the average for eastern Turkey. Other soil samples will be obtained either this fall or next spring.

A comprehensive rotation, tillage and fertility experiment is being planned for four areas on the Ataturk University farm with and without irrigation, if irrigation water can be provided from wells located near these areas. These plots will be planted in 1962.

Other studies in progress are:

a. Chemical Studies -- On Soil Samples

- (1) Forty-five soil samples, collected from various parts of eastern Turkey were analyzed for easily soluble phosphorus, calcium carbonate content and pH values. Samples from the Black Sea Coast were low in phosphorus, contained no carbonates and had low pH values. Laboratory equipment for the determination of exchangeable bases, organic matter and total nitrogen was not available for use this summer, but may be available in 1962.
- (2) Eighteen soil samples were collected from two farms near Elazig that were purchased by the Turkish government when it appeared that Ataturk University might be located near that city. Grey soil from a farm southeast of Elazig contained a very high percentage of calcium carbonate and had very high pH values. Brown clay soil from a farm west of Elazig was lower in lime content and also had slightly lower pH values than soil from the other farm. The lime content of these soils indicate that they were formed under a low rainfall environment.
- (3) Ninety-one soil samples were collected from small fields near three irrigation wells on the Ataturk University Farm to obtain data on soil variability. These analyses were helpful in the selection of areas that will be used for various soil fertility and soil management studies in 1962.

Professor Harper also made numerous field trips in connection with soils research.

Temporary soils laboratories have been established.

The Turkish staff in Soils Science at present is:

Docent Dr. Abdusselam Ergene
Dr. Assistant Omer Baykan
Assistant Nazim Oruc
Assistant Inayet Berkman
Assistant Lutfi Ogus

The first two and Miss Berkman and Mr. Ogus have had experience as Participants under the Nebraska program.

Additional staff for this department is a pressing need.

VI.

Administrative Comments

A. Ataturk University

1. Administration

The development of a strong effective Administration, conscious of the envisaged and essential role of Ataturk University in the cultural and economic development of Eastern Turkey, and determined upon the prompt development of the University in accordance with these concepts is the basic problem. The effective solution of all other problems depends largely upon this.

During the past year, this matter has been called to the attention of the Ministry repeatedly. I believe that the Ministry itself recognizes the importance of a strong administration at Ataturk University but thus far it has been unable to resolve the problem. It is possible that with the establishment of a new government, this problem can be resolved.

When I arrived in Turkey in October, 1960, I found no Turk in a position of major responsibility and authority who had worked with us in connection with the development, organization and operation of Ataturk University prior to that time.

We have had three Ministers of Education during the past year. We have had one Rector and at least two Acting Rectors, with periods when there was no person at Ataturk University who actually had administrative responsibility and authority.

The Rector was at Ataturk University from approximately the opening date of the University, October 26, 1960 until January 4, 1961, except for periods of absence. One of these was prolonged and occurred at a critical period in faculty-student relationships. He was absent from January 4, 1961 until sometime late in July except for long enough to stop briefly in Erzurum early in that month and to assume officially the responsibilities of the Rectorship. Then, except for several periods of absence, he remained through the remainder of the period.

It is, of course, impossible to establish positive policy, to give direction and impetus to a new and developing university, and to make the day-to-day decisions necessary to make a program effective without a strong and competent administration.

Consequently, and at the risk of seeming to belabor my point, I return to the theme: The first and basic step in the progress of our program is the creation of a strong administrative organization at Ataturk University.

2. The Development of a Concept of Ataturk University

Concomitant with and inherent in the development of Ataturk University,

it is essential that an intellectual and philosophical concept of Ataturk University as it was originally conceived be developed. This should delineate Ataturk University as a strong, unified university with a broad educational program; an effective, soundly-based research program oriented toward the problems of Eastern Turkey and its people; and, of course, interested in these people and their problems, and resolved to do something about them.

It goes without saying that the Rector of Ataturk University should be a man of intellectual, professional and administrative competence, devoted to Ataturk University as an instrumentality for the educational, cultural, social and economic development of Eastern Turkey.

3. Much more effective working relationships between the University of Nebraska Group and the Ataturk University Administration must be developed quickly.

Personal relations apparently have been excellent. The point is that presumably because of the lack of strong, stable administration, we have been unable to develop effective working relationships making for the development of policy or even for its delineation.

4. Faculty Development

a. Faculty of Agriculture

It was apparent as early as 1955 that senior Turkish staff in Agriculture would not be available for Ataturk University in its early years; nor, in fact, until such staff had been developed.

Upon the recommendation of the Ataturk University Development Committee, and the request of the Ministry of Education, provision was made for supplying University of Nebraska personnel to give direction to the development of and the implementation of teaching and research programs during the early years of the University and to assist with the development of a Turkish staff.

This is the explanation for our present staff at Ataturk University. It also is the basis for our Participant program for Ataturk University.

b. Faculty of Letters and Science

From the beginning of the Nebraska program, it has been understood that the major part of the support under our program would be devoted to the development of the Faculty of Agriculture; and that the Ministry of Education would assume the major part of the responsibility for developing the Faculty of Letters and Science.

However, it also was recognized that some support from the Nebraska program, for the development of the Faculty of Letters and Science, was important and necessary.

The development of the Faculty of Letters and Science has lagged badly because of lack of effective planning and sense of direction in the development of this Faculty. The unfortunate illness of Dr. Weaver contributed to this to some extent perhaps, but the major cause has been inertia during the past 18 months.

Since a strong Ataturk University requires a strong Letters and Science Faculty as an integral, or even as a central part, the situation of this Faculty requires immediate consideration in cooperation with the Nebraska Group.

c. Participant Program

One of the most important contributions of the Nebraska staff lies in its work of developing assistants into effective teachers and research workers for an institution such as Ataturk University is designed to be. The usefulness of Nebraska professors at Ataturk University is distressingly ephemeral unless they leave behind them, when they return to Nebraska, competent and understanding young Turks to continue their work.

A clarification of personnel policies, salary levels and housing for the Turkish staff at Ataturk University is very urgent.

5. Faculty and Student Housing

It has been recognized from the beginning that provision for housing Faculty members and students would be necessary at Ataturk University. I believe that initial contracts for such housing were let on July 4, 1957. As of September 30, 1961, no new housing was completed. Since October, 1960, I have pointed out repeatedly that a failure to provide such housing by October, 1961, would pose an extremely difficult situation. The Turkish staff was already badly crowded in rented hotel space. A number of additional staff members were due to arrive at Ataturk University in the fall of 1961 as Participants returned from the United States and presumably as additional teaching staff was employed to meet the additional teaching load beginning in October, 1961.

As of September 30, there was no indication that any new housing would be ready for this academic year.

Despite this fact, no steps had been taken to rent additional hotel space. As a result, the administration was taking the position that it could not employ needed staff; and in some cases, that it could not make a place for returned Participants.

As a matter of fact and although considerable progress has been made on the construction of housing, especially since last July, its solution requires prompt and effective administrative action.

6. Laboratory and Classroom Needs

The University is operating in temporary quarters for its fourth year. Laboratory, classroom, library and office quarters are inadequate. There

is no assurance that the new classroom and laboratory buildings will be ready for the school year, 1962-1963.

The completion of these buildings is a prerequisite for an effective teaching and research program and for the effective development of the two Faculties at Ataturk University.

7. The development of Ataturk University involves its development as a balanced university with two faculties, Agriculture and Letters and Science, as integral parts. To accomplish this requires prompt, effective and continuing action in cooperation with the Nebraska Group.
8. Since it is impossible to visualize Ataturk University as we conceive it, without a strong Faculty of Agriculture, interested in an organized for
 - a. an effective teaching program,
 - b. a strong, well-balanced agricultural research program, and
 - c. an agricultural extension program adapted to Turkish conditions

it is necessary that we consider certain problems here:

- a. an effective teaching program in agriculture -- The situation varies among departments as the number and stage of development of available Turkish personnel varies. The Participant program needs to be accelerated or we shall lose ground in relation to needs. At times, Ataturk University has resorted to bringing in Docents or Professors for a short time and giving a much accelerated or concentrated course. This is usually an entirely unsatisfactory compromise judged by any criteria. The only excuse for it is that there is no alternative. It should be avoided wherever possible.
- b. a strong, well-balanced agricultural research program -- This, of course, is a sine qua non for the development of Eastern Turkey. In the present stage of development of Eastern Turkey, there is a tremendous amount of basic knowledge awaiting application to the problems of the area.

The most important laboratories for such work are fields, pastures, and facilities for handling and feeding animals and poultry.

The present policies with reference to the control and use of land, animals and poultry, render the development of a meaningful agricultural research program extremely difficult.

This situation must, of course, be worked out within the framework of Turkish laws and regulations. However, it is essential that steps be taken promptly to determine whether or not we can, in fact, develop a sound, meaningful agricultural research program.

Such a program is an integral part of the responsibilities of a Faculty of Agriculture for Ataturk University as originally conceived

and planned; it is essential for the proper development of Turkish staff; and it is necessary to provide the information upon which to base an effective Agricultural Extension program for Eastern Turkey.

This is a problem which requires immediate and effective action.

- c. Purchasing practices -- Operations and research have been handicapped unnecessarily by purchasing practices. Again it is recognized that purchases must be authorized and made, and funds expended in accordance with Turkish laws and regulations. However, it is impossible to do research without spending money when it needs to be spent and without purchasing supplies when they are required. Surely purchasing and fiscal policies and procedures can be worked out so that purchases can be made expeditiously and legally when required.
- d. An Agricultural Extension Program adapted to Turkish conditions is an essential and necessary part of the development of Ataturk University. Under existing conditions it is not feasible, nor would it be sensible to develop an Agricultural Extension Service for Eastern Turkey as a duplicate of that of the University of Nebraska.

The Ministry of Agriculture has an Agricultural Extension Service charged with the responsibility for agricultural extension work. It would be unwise to attempt to duplicate this service.

However, an Agricultural Extension Service or Institute as a part of the Faculty of Agriculture is a necessary development.

Some of its services and responsibilities are listed as follows:

- (1) To give at least one course in the curriculum of the Faculty of Agriculture on Extension Philosophy, Methods, Materials, Techniques, etc. Many of the graduates from Agriculture will work for the Ministry of Agriculture. Such a course should provide valuable orientation for them.
- (2) To offer short training courses for Agricultural Extension personnel both on subject matter and on extension methods.
- (3) To sponsor field days on various phases of agriculture making use of research work and of field demonstration plots.
- (4) To offer short courses at Ataturk University in cooperation with the Ministry of Agriculture on specific aspects of agricultural and livestock production.
- (5) To offer within the limits of its staff capacity, 2 or 3-day short courses during the winter vacation at selected places in Eastern Turkey. This, of course, would be done in cooperation with the Ministry.
- (6) To assist the Ministry of Agriculture in radio and press programs, and perhaps to a limited extent in one-day programs at accessible villages.

- (7) Assist the Ministry of Agriculture by preparing extension material, especially that based on research at Ataturk University.

An organization for the development and implementation of such an Extension Program should be set up within the Faculty of Agriculture as soon as the necessary details can be worked out.

9. Library

A modern library is an essential part of a modern university in supporting the development and implementation of sound teaching, research and public service programs. For five years we made slow but somewhat consistent progress toward the development of the library at Ataturk University according to our concept of what a university library should be and do.

In 1959, Professor Collings spent 2 or 3 months at Ataturk University advising on and helping with the development of the library. Much of what he accomplished was lost because of changes in administration in 1960.

However, at the request of Ataturk University, we brought Professor Vennix here for approximately three months during the past summer. We had considered bringing him for two years but decided against that, principally for two reasons:

- a. University policy toward the development of the library was still uncertain.
- b. Before bringing a librarian for two years, it seemed wise to obtain the opinion of a trained librarian on the job, with reference to the relative value of a series of short periods in comparison with one longer period.

The reason for bringing Professor Vennix at all in 1961 was that it seemed necessary to halt the disintegration of the library and to begin rebuilding it.

Professor Vennix did an admirable piece of work in organizing library procedures and in developing the library staff. He did this under great difficulties as little had been done with the library during the preceding year except to allow it to deteriorate. Ataturk University has already requested Professor Vennix's return in the summer of 1962, this time for a two-year assignment. This will be our recommendation, provided that within the next few months a forward-looking administrative policy toward the development of the library is indicated, and provided an adequate staffing pattern has been developed and is in process of implementation. Without these, no useful purpose would be served by returning Professor Vennix to Turkey.

B. Ankara University

Comments with reference to Ankara University are summarized as follows:

1. Agricultural Extension and Information

The completion of the new Home Economics Building, scheduled for the late summer or fall of 1962, should provide ample physical facilities for the de-

Department for some time to come.

As previously reported, a Turkish professor is Chairman of the Department. Dr. Assistant Orhan Kural is spending this year at the University of Wisconsin on a program of academic work and observation and experience in Agricultural Extension work. Assistant Ahmet Baykurt is working on his doctorate. Additional assistants should be provided the department and one or two additional assistants should be sent to the United States for one year each. This should be done by not later than January, 1963. Whether this is possible or not is doubtful.

It is planned to terminate our program with Ankara University as of June 30, 1963.

2. Department of Home Economics

This department apparently is making good progress and we plan to terminate our program with it as of June 30, 1963.

The new Home Economics building should be completed during the summer or fall of 1962. This will provide good physical facilities for the department, provided reasonable equipment needs are met. Some of these will be provided under the Nebraska program.

The development of the staff will need continuous attention. However, Dr. Suat Kundak and Dr. Ayse Erkut both have good academic backgrounds and should become docents by 1964. Assistant Sevim Guney should receive her doctorate this coming fall. Three additional assistants should be sent to the United States prior to the conclusion of our program. Whether satisfactory people for these assistantships can be obtained and developed in time for this is uncertain.

With the departure of Dr. Morrow, now scheduled for approximately July 1, 1963, it may be highly desirable that the Faculty of Agriculture obtain an American professor for an additional year or two, either as a Fullbright professor or by direct hire. At times there are available in Turkey competent Home Economists, the wives of American personnel here, who might be interested in part or full-time employment.

3. Veterinary Science

With the departure of Dr. Bennett T. Simms from Turkey on September 14, our support of the program with Veterinary Science, as far as personnel is concerned, ceased.

4. General

During the next two years, we shall continue to have a number of Participants from the Faculties of Agriculture and Veterinary Science of Ankara University in the States. Very few remain to be sent and the number in the United States will decline sharply with the current fiscal year.

A few equipment orders remain to be received and cleared through Customs. However, if there are new orders for Ankara University at all, except for Home Economics, they will be to meet pressing needs and costs will be minor.

C. General Comments

The morale of the Nebraska Group generally continues excellent.

Mr. Allen, Associate Chief Advisor, has continued to carry the immediate responsibility for the details of the Ankara University part of the program and to give effective help and support on general administrative problems and details.

Professor Carter has carried a heavy and exhausting load at Ataturk University; over and beyond what might fairly be called a normal load of responsibility, except for the fact that the degree of responsibility is dependent upon the magnitude and difficulty of the task.

Miss Sally McCullough, with the departure of Miss Lesoing, assumed the duties of Administrative Secretary smoothly and well. She was replaced on the Agricultural Faculty campus by Miss Wylene Swanstrom, who arrived July 18.

VII.

Administrative Summary

This report marks the completion of six and one-half years' work under the University of Nebraska program in Turkey. As presently visualized and assuming necessary budgetary implementation plus a reasonable environment in which to work, the program is to continue through June 30, 1967, or for another six years.

The program with the Veterinary Faculty of Ankara University as far as it involves Nebraska personnel is scheduled to terminate in September 1961, and with the Faculty of Agriculture 30 June, 1963. There may still remain under the program with these two Faculties, a limited amount of participant training to conclude.

In my opinion, the above dates should be kept in mind as firm dates for the termination of the Nebraska program in Turkey. Without doubt, as measured against the ideal, much will remain to be done; but by these dates, Ankara University can, of course, arrange to take full responsibility for the areas in which we are now assisting them. There seems every reason to believe that, given reasonable support from the Turkish government for the next six years, and especially if it is provided with competent leadership, Ataturk University can assume full responsibility for its program June 30, 1967.

A summary of progress, an evaluation of problems, and possibly some suggestions for the future, follow:

A. Ankara University

The Ankara University program developed with reasonable dispatch after the arrival of Nebraska personnel in Ankara, beginning 13 April 1955. The Faculties involved had been contacted by the Nebraska Study groups which had visited Turkey in 1954, the preliminary study having been made by Professors Elvin F. Frolik and George S. Round; and the more detailed study by the committee headed by Dean W. V. Lambert, with Dean Roy M. Green, Dean K. O. Broady, Professor Carl Olson, Jr., and Professor Albin T. Anderson as members.

The latter committee had held lengthy discussions with members of the two Faculties and work with them began soon after mid-April, 1955.

The major contributions by and through the Nebraska University Group fall into three general categories: (1) providing the services of Specialists in various fields or areas in Agriculture and Veterinary Science, (2) arranging for further education or experience in the United States for professors, docents and assistants from the two Faculties under "Participant Training" and, (3) providing laboratory and teaching equipment, aids and supplies. These are discussed under appropriate headings:

1. Faculty of Agriculture

A. Services of American Staff

All of these staff members performed the work of professors in teaching

classes with the aid of assistants, with the primary purpose of assisting in the development of younger staff members; advising on teaching and research programs; in cooperating with the Ministry of Agriculture in their respective fields usually through or in cooperation with ICA Specialists and in numerous other ways with the institutions and agencies set up to serve agriculture in Turkey. No doubt some of them were more imaginative than others; some had greater opportunities than others because of the people with whom they worked or the situations within which they worked. Perhaps some were more circumspect in keeping the Chief of the Group advised of their activities. The fact that some are given less space in the discussion which follows is not necessarily a reflection upon them. It has been my privilege to work with every person of our Group who has worked with Ankara University. In my judgment, these people, without exception, have made a worthwhile contribution to the program under which they came to Turkey. In many cases they have gone far beyond what could have been considered a reasonable contribution.

(1) Crop Production and Improvement

- a. T. H. Goodding was in Turkey for approximately two years beginning about July 1, 1955. His immediate responsibilities were in the fields of plant ecology and cereal crops. In addition to his work in these areas, Prof. Goodding was of inestimable value in many other ways. He assumed responsibilities for many administrative details of immediate concern to our program with Ankara University. He devoted time and effort to building up the library resources of the Faculty of Agriculture and worked closely with the members of the departmental staff. He also spent one month assisting with the teaching program at the newly established Ege University.
- b. Elverne C. Conard was in Turkey under our program for somewhat more than two years beginning in May, 1956. He is credited with having made a significant contribution to the organization and development of the Forage Crops research program of the Faculty of Agriculture. Professor Conard also worked closely with specialists in his field in ICA and in the Ministry of Agriculture. Since his return to the United States, he has maintained an active interest in the Nebraska program and has contributed materially to its advancement.

(2) Animal Science

- a. Cecil T. Blunn spent approximately $2\frac{1}{2}$ years in Turkey, beginning late in February 1956. Professor Blunn, in addition to meeting his primary responsibilities in connection with work in animal breeding, statistics and experimental design with the Department of Animal Science, worked closely with ICA Specialists and Turkish personnel in other agencies. In conjunction with these, he visited many of the Ministry of Agriculture stations in which plant and animal research was

underway and studied the design and execution of research projects, the recording and treatment of data and the like. He also assisted in the organization and instruction in short courses in experimental design and statistics for research workers in the Ministry of Agriculture.

(3) Agricultural Engineering

- a. John C. Steele spent approximately 2-1/3 years in Turkey as Specialist in Irrigation and Drainage, under the Nebraska project, beginning in March 1956. Because of the personnel situation in the department with which he worked, Mr. Steele carried an extremely heavy departmental load and in addition, found time to do considerable field and consulting work in problems in his area of interest.

(4) Plant Protection

- a. W. W. Ray spent somewhat more than two years, primarily as a Specialist in Plant Pathology, beginning about July 1, 1956. Professor Ray was active with his departmental responsibilities and in addition cooperated in a considerable amount of field work, both with the Faculty and with Ministry of Agriculture personnel.

(5) Soils Science

- a. Robert L. Fox spent more than 2-1/2 years with an immediate interest in Soils Management and Soil Fertility problems. Professor Fox proved to be a capable, imaginative, hard-working and effective research worker. He initiated and organized an extensive research program including field and laboratory studies and made as extensive studies of soil fertility conditions as possible. He apparently commanded deep respect from the assistants with whom he worked.

(6) Horticulture

- a. L. L. Claypool spent only a little more than one year under our program, primarily as a Specialist in Fruit and Vegetable Storage problems. Prof. Claypool brought to his assignment in Turkey, professional stature and competence and personal qualities which enabled him to make significant contributions while with the Nebraska Group.

(7) Home Economics

Miss Mary Rokahr was with the Nebraska Group for approximately two years from June 1956. Dr. Evelyn Morrow joined the Nebraska Group in January 1959 and is scheduled to remain until June 30, 1963. The work of these two Home Economists has been directed toward developing a philosophy of Home Economics education at the

University level in Turkey, formulating and implementing plans for the development of a Department offering a major in Home Economics at the University level; laying the foundations for a research program in the various phases of Home Economics; developing a Turkish staff; and obtaining the facilities necessary for carrying out the work of such a department.

Progress has not been as rapid as might have been desirable. However, it seems that today the concept of Home Economics education at the University level has relatively wide acceptance and the nucleus of a teaching and research staff is in being. This includes one docent with two years' experience in the United States, two doctor assistants with earned Ph.D. degrees from leading American universities and one assistant who should receive her doctorate within the near future. In addition, an apparently stable departmental organization has been effected with apparently competent and interested Turkish leadership and with general Faculty support. The Department will accept "majors" in the fall of 1961 and after six years of effort, a modern Home Economics building, financed largely from counterpart funds, is under construction. This building should be ready for occupancy by the fall of 1962.

It should be noted also that active research work involving living, housing, and dietary conditions in Turkey, including those at the village level, are underway.

It would be impossible to relate in detail the work done by Miss Rokahr and Dr. Morrow with other Home Economics workers and those interested in Home Economics and related activities in Turkey.

Others of the Nebraska Group have made significant contributions to the development of the Home Economics program. Among the most significant contributions aside from those made by administrators in the course of discharging normal responsibilities, was the work of Stanley A. Smith and Paul Weigel, architects working on the Ataturk University phase of the Nebraska program. These two men played a significant part in developing plans; first those which led to the competition under which architects were selected for the building, and also in advising on the development of plans for the building itself.

Home Economics is one of the two new departments developed within the Faculty of Agriculture with the direct assistance and guidance of the Nebraska Group.

(8) Extension and Information

The second and other department to be developed at Ankara University is that of Extension and Information. Harold L. Allen has been directly and continuously involved in this effort since September, 1956, and is now scheduled to continue until 30 June,

1963. In addition to this exacting task, he has done an immense amount of additional work, much of it with ICA and Ministry of Agriculture specialists in developing plans for strengthening the organization of extension, for the better training of extension workers, the preparation of extension materials and in participating in extension workers training programs.

In addition, he has served as Associate Chief of the Nebraska Group since the fall of 1959. In this capacity, he has handled a tremendous amount of administrative detail for the program generally, but especially for the Ankara University phase of the program.

In the development of the Department of Extension and Information, frequently under great difficulties, Mr. Allen has displayed to an exceptionally high degree, qualities of patience, understanding, perseverance, imagination, sense of direction, organization and purpose, and has made notable progress. The department has been established with a Turkish professor as chairman. Two assistants are in process of development, with one of them having already obtained his doctorate. Arrangements for housing the new department for the immediate future, in the new Home Economics building, have been made. It is now planned that the connection of Mr. Allen and the Nebraska Group with the department will terminate 30 June, 1963. During the coming year, Mr. Allen's responsibilities with the department will continue to be demanding. It is hoped that during the fiscal year 1963, his responsibilities here may be lessened in order to give him more time for other activities.

B. Participant Program

As of January, 1961, a summary of the University of Nebraska Participant Program was submitted. As of that date, 59 Participants had been sent to the United States for the Faculty of Agriculture. Since then, nine additional participants departed for the United States and one is scheduled to depart during January 1962. This will make a total of 69 Participants from the Faculty of Agriculture.

As of June 30, 1961, forty-seven (47) of these had returned to Turkey. Of these, eleven (11) had been promoted from Docent to Professor. Seven (7) returned Participants have transferred from Ankara University to the Faculty of Agriculture, Ege University. One of these is serving as Rector, Department Chairman and Professor, and each of the other six is serving as Professor and Department Chairman. A total of twenty-nine (29) former Participants are professors.

A total of sixteen former Participants who have returned are docents. Eleven (11) of these have been promoted from Assistants since their return. Two returned Participants received their Ph.D. degrees in the United States and are now working on requirements for promotion as Docent. Nine (9) Assistants, one (1) docent and one (1) professor are in the United States. Four (4) of these

should return in 1961 and seven (7) in 1962. One returned Participant is Secretary for the Faculty of Agriculture, one has transferred to other government work, and one is in the United States working on an advanced degree but is no longer under the Nebraska program.

With the exception of probably one (1) or two (2) additional participants in each of Extension and Home Economics, this probably will conclude our Participant program with the Faculty of Agriculture.

C. Commodities or Equipment

We do not have a breakdown of expenditures for commodities as distributed among the Faculties of Agriculture and Veterinary Science of Ankara University and Ataturk University. Through June 30, 1961, a total of \$132,401.69 had been spent for equipment for these three agencies from contract funds. The largest portion of this had been spent for the Faculty of Agriculture; the next largest amount for the Veterinary Faculty and the smallest amount to date for Ataturk University. As pointed out later, additional purchases for Ataturk University were made from defense support funds.

2. Faculty of Veterinary Science

The program with the Faculty of Veterinary Science has followed the same general pattern as that with the Faculty of Agriculture.

a. Services of American Specialists

- (1) Two specialists from the Nebraska Group worked with the Faculty of Veterinary Science.

Dr. Fred F. McKenzie spent two years under the Nebraska University program beginning in August 1956. Dr. McKenzie's immediate responsibilities were teaching and research in the Physiology of Reproduction with special emphasis on artificial insemination. He apparently carried on a stimulating program with his Assistants and students. However, his interests were far-reaching. He worked closely with ICA Specialists and with those in the Ministry of Agriculture on general livestock production programs.

Dr. Bennett T. Simms came to Turkey about July 1, 1957, and is scheduled to depart in September, 1961. Dr. Simms has carried on an active program involving teaching and research in animal diseases and parasites. He has worked extensively with Ministry of Agriculture veterinarians in problems connected with the control of diseases, especially African Horse Sickness and White Muscle Disease in lambs. He assisted the Veterinary Faculty in developing research programs which were approved for support under P.L. 480. Dr. Simms participated in several international conferences and his counsel was solicited by many short-time consultants who visited Turkey.

b. Participant Program

The Veterinary Faculty consistently followed the practice of selecting assistants and doctor assistants as Participants and most of them were sent for periods of one year.

Thirty-seven (37) Participants from the Veterinary Faculty have been sent to the United States under the Nebraska program and two are scheduled to depart in January 1962. Twenty-one (21) of the thirty-seven Participants who have gone to the United States have returned to Turkey. Twelve (12) of these have been promoted to Docent since their return to Turkey or expect promotions within the near future. With the exception of two, all Participants from the Veterinary Faculty are still associated with the Faculty. A number of Participants have been able to remain in the United States for periods beyond those under the Nebraska program, financed by assistantships or grants from American universities.

c. Commodities or Equipment

This has been covered in the discussion under "Faculty of Agriculture."

B. Ataturk University

The Ataturk University phase of the Nebraska program has attracted more general interest than the Ankara University phase, both in Turkey and in the United States. No doubt this has been due, at least in large part, to the fact that the program has been associated with the effort on the part of the Turkish Government to establish the education and cultural center in Eastern Turkey, visualized by Ataturk and referred to in his messages to the Grand National Assembly in 1937 and 1938. A committee composed of 15 representatives from Ankara University, Istanbul University and Istanbul Technical University, under the leadership of the Minister of Education, was established in 1951 to study the Eastern Region of Turkey with a view to the development of a university to serve the needs of this region. This committee was given a broad charge; namely to consider the development of a new university in connection with the general development and economic growth of Eastern Anatolia. This committee was replaced by a smaller group, including two members from the original committee. Joint planning with this group dates from my arrival in Ankara 13 April 1955. From this time until the summer or fall of 1958, three or four members of the University of Nebraska Group worked as members of the Joint Group on plans for Ataturk University. The committee also drew upon other resources available, including University of Nebraska personnel working with Ankara University. The work with Ataturk University may, for the sake of convenience, be divided into two phases; that devoted primarily to planning, and that dating from the opening of Ataturk University to students. The two necessarily overlap as planning is a never-ending task.

1. Period April 1955 to Fall 1958

During this period the major part of the work of the Nebraska Group concerned with Ataturk University was in Ankara.

a. Personnel:

- (1) Marvel L. Baker was in Turkey from April 11, 1955 (in Ankara April 13) to June 29, 1957, as Chief of the Nebraska Group. With reference to the Ataturk phase of the program, he acted

as Chief Advisor and Agricultural Advisor. He visited Turkey in the springs of 1958, 1959 and 1960 as the representative of the Chancellor of the University and returned in October 1960 as Chief of the Group.

- (2) Stanley A. Smith was in Turkey for two years from early in May 1955 as Architectural Advisor.
- (3) Albin T. Anderson was in Turkey for approximately two years from June 1955 as Letters and Science Advisor.
- (4) Orvis J. Keller was in Turkey for approximately two years from June 1955 as Engineering Advisor.

The fact that all of the four original members of the Group came about the same time resulted in a complete turnover within a short time in 1957, although I remained until June 29 to provide some continuity. The fact that we had a considerable number of staff with the Ankara University phase of the program made the change less abrupt in fact than it appears.

The following were the staff members who came in 1957:

- (5) Otto G. Hoiberg came as Chief of the Nebraska Group. As such, he was also Chief Advisor for the Ataturk University Group and Agricultural Advisor. In this latter capacity, he called upon members of the Nebraska Group working with Ankara University for assistance in specific fields with which he lacked familiarity. Hoiberg remained until August 1959.
- (6) Professor Carl J. Schneider replaced Professor Anderson as Letters and Science Advisor early in June 1957 and remained until August 1959.
- (7) Paul Weigel replaced Professor Smith as Architectural Advisor, arriving in June 1957 and remaining for approximately two years.

Professor Keller was not replaced as Engineering Advisor because in 1956 the Turkish Government decided to drop the engineering work previously planned for Ataturk University. This ostensibly was due to its anxiety to develop an Engineering School of University rank at Trabzon. Because of the representations of the Nebraska Group concerning the importance of engineering in the University structure as originally contemplated and of the impossibility of developing a strong program in Agricultural Engineering in which the Turks professed great interest, without the support of an Engineering Faculty, the Ministry suggested that we plan to include Civil Engineering and Architecture. This actually was never developed.

It should be pointed out that the office of the Chief of the Group

handled the administrative work in connection with the Ankara University program and that in the processing of participants and commodity orders, members of the Group were of invaluable assistance.

b. Work of the Ataturk University Planning Group

It is impossible to outline here in detail the work of the Group. As long as the "Ataturk University Development Committee" remained in being or until mid-summer of 1958, meetings of the Committee were held more or less regularly and supposedly once per week. As of about December 1, 1957, Professor Ahmet Ozel was appointed Rector of Ataturk University, a position which he held until August 1958. With the appointment of a Rector, the work of the Committee became relatively less important. The working contacts of the Nebraska Group gradually shifted from the Committee to the Ataturk University administration.

The areas of work undertaking during this period may be outlined and referred to briefly as follows:

- (1) The development of an understanding of the philosophy of land-grant colleges and universities. Although the University of Nebraska had been asked specifically to assist in the development of a "land-grant type university" for Eastern Turkey, and although the Turkish Committee appointed in 1951 was to study the development of a university in connection with general development and economic growth of Eastern Turkey; an understanding of the characteristics, functions, organization and operation of land-grant universities in the United States, proved to be of slow growth. This, of course, was natural and, as far as individuals were concerned, there were some who had a considerable understanding of the nature of American land-grant universities and an appreciation of the possible importance of similar institutions for Turkey. Some of these had some background of experience in the United States; others did not.
- (2) The selection of a site for the University. Before the arrival of the first member of the Nebraska Group in Turkey, the Government of Turkey had decided to locate Ataturk University at Erzurum. Four sites apparently had been considered -- Diyarbakir, Elazig, Erzurum, and Van. In May 1955, the decision was made to develop the University on its present site, or at least the Committee decided to recommend this site, which had already been selected tentatively, to the Government.
- (3) The development of plans for the structure and organization of the university.
- (4) The development of plans for curricula to be offered.
- (5) Preliminary plans for the development of the campus and physical plant, leading to an "Architectural Competition" resulting

in the selection of architects. These architects were to prepare the actual plans for the development of the campus and the construction of the buildings. The responsibility for the implementation of these plans was the responsibility of the Ministry of Public Works.

(6) The Development of a basic law or charter for Ataturk University and obtaining its passage.

(7) Development of plans for the creation of an administrative, teaching and research staff for Ataturk University and their implementation. A voluminous report would be required to cover any one of the above seven areas of work. May it suffice to say here that:

(a) The development of an understanding of the concept of the "Land-Grant Philosophy" and approach to education has made notable progress in Turkey during the past six years. I would not suggest that the University of Nebraska Group, or even that Americans, have been solely responsible for this. A part of the growth is due to the more general understanding on the part of Turks of the basic problems confronting Turkey and of the necessity for seeking realistic solutions to them; a part of it is due to the forward-looking leadership shown by Turks in different levels of society and from different governmental agencies and academic disciplines.

(b) The site of the University has of course been determined.

(c) Work on the development of plans for the structure and organization of the University began as early as May 1955 and, of course, continues. Its broad outlines now provide for two Faculties, Agriculture and Letters and Science. Undoubtedly other Faculties will be added as needs are recognized and as resources permit their development. As far as can now be foreseen, the University of Nebraska will not be involved in the development of additional faculties.

(d) The development of curricula will, of course, keep pace with the implementation of plans for the development of teaching programs for the two Faculties.

(e) The preliminary plans for the development of the campus and physical plant were completed, the architectural competition held, architects selected and contracts let for the construction of the initial buildings on 4 July 1957. Delays for various reasons were encountered in initiating construction and little work was done until 1959. It is possible that one Faculty housing unit of 24-apartments will be ready for occupancy by October 1961. It is unlikely that either the science laboratory building or the classroom building will be ready for use before the fall of 1962. In the meantime,

classes are held in a remodeled school building as they have been since the first students were admitted in the fall of 1958. It is also unlikely that Faculty and Student housing aside from the one building referred to above will be completed before 1962. In the meantime, the Faculty is inadequately housed. The natural increase in faculty numbers and the admission of a freshman class in 1961 will require additional temporary housing.

(f) The Ataturk University law was approved May 31, 1957. It represented a considerable compromise on the part of the University of Nebraska Group. However, the administration of the University and the competence and philosophy of its administrators and staff are of more importance than the law itself.

(g) The development of an administrative, teaching and research staff for Ataturk University has been a primary concern of the Nebraska Group for more than six years. Obviously no university can function properly without a strong administration and a strong teaching and research staff. The development of a strong administration has been prevented by frequent changes in personnel and sometimes by the appointment of personnel unfamiliar with the aims and functions of Ataturk University. As has been true from the beginning, consistent and satisfactory progress with the development of Ataturk University depends upon the appointment of a strong, understanding Rector and of similar Deans, with a vision of the possibilities of Ataturk University and the strength and authority to move forward. It is hoped that this development will be brought about soon.

The development of the teaching and research staff has proceeded slowly being dependent largely upon the recruitment and development of young staff. This, of course, is in turn affected greatly by the vision and competence of leadership at Ataturk University and by the opportunities afforded staff to do work in which it is interested and which can be expected to lead to professional advancement. It has been apparent for the past six years that senior Turkish staff of competence and in numbers at all commensurate with needs, would not be available for Ataturk University except as they could be developed. The Participant program for Ataturk University has made a creditable beginning toward the development of such a staff. Time is, of course, required to develop such a staff and the program itself has lagged far behind what is desirable. This program has been discussed in some detail in this report and will not be repeated here.

Aggressiveness, imagination and adequate financial support are imperative if the teaching and research staff is to be developed even reasonably well in relation to the present and

growing needs of Ataturk University. The first two largely, and all three to a considerable extent, are dependent on the quality of administrative leadership at Ataturk University.

2. Period Since Fall of 1958

This period coincides roughly with the operation of Ataturk University as a teaching and research institution. With the opening of the University to students in the fall of 1958, the center of operational interest for the Nebraska Group shifted largely to Erzurum, although for many reasons the Ankara office continued to be of extreme importance to the operations.

a. Secretarial Staff at Ankara

The secretarial staff at Ankara served two functions. It served the requirements of the office of the Chief Advisor which dealt with the general programs and problems of the Group in Turkey, including those involved in the Ataturk University program; it also took care of the immediate staff needs at Ankara University. It included the following personnel:

(1) Mary Lou Magorian, approximately 18 months in Turkey, beginning in April 1955. Her responsibilities were those of Administrative Secretary for the Group.

(2) Virginia Louise Nelson, approximately 20 months, from early July 1955, working primarily with the Ankara University Group.

(3) Bonnie Neeman, approximately 19 months in Turkey from October 1957; first as second secretary in the office of the Chief Advisor; later she assumed the responsibilities of Administrative Secretary.

(4) Regina Hughes, approximately 16 months from November 1956, as secretary for the Ankara University Group.

(5) Mary Jane Wollen, approximately 18 months in Turkey, beginning early in March 1957, as Secretary for the Ankara University Group.

(6) Doris Lesoing, more than 3½ years in Turkey beginning in October 1957, as Administrative Secretary.

(7) Beth Woods, approximately two years beginning 2 October 1958, as secretary for the Ankara University Group.

(8) Sally Anne McCullough, from 3 December 1960 until May 1961 as secretary for the Ankara University Group. At this time she assumed the duties of Administrative Secretary for the Group.

(9) Wylene Swanstrom, arrived 18 July 1961 as secretary for the Ankara University Group.

b. University of Nebraska personnel stationed at Ataturk University with their field of interest and developments in them are as follows:

(1) Dairy Technology. Dr. Lawrence K. Crowe was in Turkey for a little more than two years beginning in October 1958. Dr. Crowe also came to Turkey as Associate Chief Advisor for the Nebraska Group and was appointed Chief Advisor August 1, 1959. Dr. Crowe had immediate responsibility for the leadership of the Nebraska Group at Ataturk University and the day to day relationships with the Rector of the University and the Dean of Agriculture there, and was the Administrative Chief for the entire program beginning August 1, 1959. He pursued a vigorous program as administrator and in his own field and has continued his interest in Ataturk University since his return to the United States.

It is our thinking that for some time to come, work in dairy technology should be administered through the Animal Science Department. With the return of Dr. Ahmet Kurt in the summer of 1962, work in this area should develop rapidly. In time, and as additional resources can be made available, a Department of Agricultural Technology may be established. There are two additional assistants now in the United States.

(2) Biological Sciences. The first specialist in Biological Sciences was Professor H. L. Weaver, who also served as Letters and Science Advisor. Professor Weaver, aside from his departmental responsibilities, gave of his time and energy to the development of the library and of student and curricular problems. With the departure of Dr. Crowe, and the re-establishment of the administrative center for the Nebraska Group at Ankara, Professor Weaver was designated as Ataturk University Advisor, with immediate responsibility for the Nebraska Group activities at Ataturk University. Unfortunately, on the evening of the same day, 27 October 1960, he suddenly became ill and was forced to return to the United States. Professor Weaver had arrived in Turkey on July 19, 1959.

Professor Weaver was replaced by Dr. John M. Winter who arrived in Turkey 3 June 1961.

This position is projected through 1965. We hope to proceed with the organization of a Department of Biological Sciences. We have a docent in Zoology who seems a capable person. He is Suavi Yalvac, a returned Participant, and we expect to have a returned Botanist, Assistant Mehmet Oner, this fall. He will have completed approximately $2\frac{1}{2}$ years' work in the United States.

It is highly important that additional assistants in Botany be obtained. If possible, some of these should be Doctor Assistants. It also is important that additional assistants in Zoology and Assistants in Bacteriology be obtained. Those in Bacteriology should be Doctor Assistants if possible and at least one of them should spend considerable time in the United States.

(3) Soils Science. Two men have been brought to Ataturk University as Specialists in Soils Science. These were Professor Mark D. Weldon for approximately two years from June 1959 and Horace J. Harper who arrived in May 1961. Both men have shown ability, imagination and initiative in organizing and developing the teaching and research program. One assistant has been advanced to Docent and at the present time, Professor Harper and his assistants have a number of research projects underway.

This position is projected through 1965 which is short enough. The Turkish staff group now includes one Docent, Dr. Abdusselam Ergene. It also includes one Doctor Assistant, Dr. Omer Baykan, who has a Master of Science from Pennsylvania. Dr. Baykan went to Wisconsin this fall for a school year's additional work, this time with Dr. Marion Jackson. However, although Dr. Baykan can assist the department in his specialized field, it is probable that much of his time will be devoted to the development and operation of the Agricultural Research Institute as its Director.

There are two assistants, returned Participants, now at Ataturk University and there are two in the United States, one of whom will return this fall and one in January 1963. However, in view of the importance of this department and the wide range of work which it covers, its staffing program must be pushed aggressively.

(4) Animal Science. Professor M. A. Alexander came to Turkey in October 1959. He is now on advance home leave and is to return this fall for an additional tour. Professor Alexander, working with a group of assistants, six of whom have been in the United States, has developed a well-organized teaching program and a research program with cattle and sheep that is pointed toward production problems in Eastern Turkey. This has attracted considerable local attention. The group also has established worthwhile contacts with villagers and is cooperating with the vilayet extension service.

This position is projected to the fall of 1963. Although at that time, the department will have no Turkish staff with wide experience or with as much seasoning as might be desirable, it has promise of having a considerable number of competent young staff members. Probably by that time, it should have at least three Docents who will have had considerable good experience and who offer real promise. It now has three other doctor assistants who should become docents in 1965 or 1966 and one assistant working for his doctorate. All of these have had or are expected to have experience in the United States. If additional assistants of promise become available, they should be obtained.

(5) Agricultural Economics. Two Agricultural Economists have been supplied through the Nebraska Program to Ataturk University. Dr. Ottar Nervik was in Turkey from October 1959 to May 1961 except for absence during the summer of 1960 on vacation and leave without pay. Professor Leo J. Fenske arrived 8 October 1960.

These two men carried a heavy teaching program due to the large number of Agricultural Economics "majors" and the failure of assistant to materialize as scheduled. Professor Fenske is developing a research program and has made numerous contacts with villages to facilitate the work. Some promising young assistants are possibilities in this department.

One position in this department is projected through 1967 and one through 1966. The reason for this is that the department cannot be put on a functioning basis before these dates as far as can now be determined.

There are no assistants with any seniority in this area or in Economics. One should return this fall, but it will be 1967 before he can become a Docent. One other promising assistant is now in the United States and two are scheduled to go to the United States in January 1962. There is one assistant in Sociology and additional assistants in Economics will be obtained. However, it is obvious that a departmental staff is far from being established.

(6) Crops Science. Professor Ernest J. Wheeler arrived in Turkey 21 September 1960. Professor Wheeler has shown imagination and initiative in welding his assistants into an effective teaching and research group, with a broad range of experimental projects. He expects the addition of a returned Participant with a Ph.D. degree, to his group this fall.

This position is projected through 1966. Unfortunately, this department is not as far along as it should be. Presumably, Participant Fahrettin Tosun's return from the United States will help very much. He received an M.Sc. and a Ph.D. degree from Nebraska. He is a person of ability and should add strength to the department. However, in the normal course of events, it will be 1966 before he becomes a Docent. Professor Wheeler has other capable assistants working on their doctorates. It is obvious that 1966 is as early as this department can be established under Turkish leadership. Additional assistants must be obtained. Preferably some of these should be doctor assistants.

As presently set up, this department also includes work in Plant Protection (Plant Pathology and Entomology). As staff can be developed in this area, it may be desirable to set up a separate department, but no American staff in this area is contemplated.

(7) Agricultural Engineering. Professor Deane G. Carter also arrived 21 September 1960. Professor Carter has been handicapped by the lack of suitable assistants but has one promising young assistant and presumably will have a well-trained returned Participant as assistant for the coming year. With the help of other assistants, he has developed a modest teaching program and is developing some research work. With

the illness of Professor Weaver, Professor Carter was asked to assume immediate responsibility for the Nebraska Group at Erzurum. This has involved a great deal of work and responsibility, frequently under great difficulties.

This position is projected through 1966. Even so, it may be desirable to combine the work in this area for the next several years with that in Soils Science. Presumably there will be one assistant with a very good Agricultural Engineering and Engineering background available this fall. Even so, it will be six or more years before docents are available; assistants with satisfactory engineering backgrounds are practically unavailable, and engineering support within the university is lacking. This situation needs continuing attention.

(8) Library Development. For the past six years, the Nebraska Group has attached great importance to the development and maintenance of a strong teaching and research library for Ataturk University; a library available for use by students and staff members. Two short-term consultants have come to Turkey under the Nebraska program.

Professor Wayne Collings spent the summer of 1959 and Professor Arthur J. Vennix arrived in June 1961 for a stay of approximately three months to advise on library problems and to assist in its development. Some progress has been made in developing the library but because of the lack of strong and consistent administrative understanding and support, its development has been retarded greatly.

If the place of the library within the University can be clarified satisfactorily, it is essential that a University of Nebraska Advisor be brought here for at least a one-year and preferably a two-year assignment.

(9) Extension and Information. An Extension and Information Specialist is contemplated for fiscal 1964 and 1965. We expect to have two assistants to work with him, one for the first year he is here and who would go to the United States for one year in fiscal 1965, and the other who would return from a year there in fiscal 1964. Both men will have a considerable background in subject matter.

We do not contemplate a department in this area, at least for several years. Its work will be administered, probably through Agricultural Economics or through the Agricultural Extension Institute which should be established within the near future.

(10) Supporting Personnel. Mr. Homer Judge was with the Nebraska Group for approximately two years from November 1958; Mrs. Vera Crowe served as part-time secretary during the time Dr. Crowe was in Turkey; Robert Soucek has been at Ataturk University as secretary since October 1959; and Mercedes Ames arrived in Turkey September 15, 1961 to replace Robert Soucek.

c. The Development of the Program at Ataturk University

The Nebraska Group has rendered invaluable service in the development of the teaching and research program in Agriculture, working with the relatively young Turkish staff members. An Agricultural Research Institute has been organized and plans for an Agricultural Extension Institute are well advanced. Assistants are given considerable responsibility and in general are developing well. Docents with experience in the United States have carried the burden of work in Chemistry and Zoology and this fall returned Participants in Botany and Economics should be available.

d. Equipment

In addition to the equipment bought from contract funds and referred to previously, equipment valued at approximately \$135,000 has been obtained for Ataturk University from defense support funds.

VIII.

- A. The Ankara University program has undoubtedly been of great value to the Faculties involved, and indirectly to Ege University. To one who has been somewhat familiar with the two Faculties over the past six years, their development is a source of real satisfaction. Naturally, it would be presumptuous to suggest that the development has all been due to the Nebraska program. Without question, the program has been an important factor.
- B. The Nebraska staff assigned to the Ankara phase of the program has contributed to a significant extent to developments in Turkey aside from their work with the two Faculties. They have done this by cooperating with ICA specialists, with the Ministry of Agriculture and other agencies in Turkey as well as members of the Ankara community.
- C. Two new departments in the Faculty of Agriculture, Home Economics and Extension and Information, have been established. It is our opinion that the present connection of the University of Nebraska with the Faculty of Veterinary Science be discontinued as of September 1961, except for the completion of any Participant programs or processing of equipment orders which may be incomplete as of these dates.
- D. We believe that ICA should examine the feasibility of limited support for these two Faculties for limited and specific objectives in the future.
- E. By next year, Nebraska should evaluate the desirability of continued support for the Departments of Home Economics and Extension and Information. If such support seems necessary and desirable, possibilities for obtaining it for a limited time outside the Nebraska program should be explored and assistance given to the Faculty in arranging for such support.
- F. Unfortunately, a consideration of the present status of Ataturk University development and reference to reports throughout the life of the Nebraska program reveal that the problems associated with the effective development of the University remain the same--this despite many and real accomplishments.

- (1) Ataturk University requires for satisfactory progress and development a strong, responsible administrative structure able to function with authority and to command the support of its staff, its students and the Turkish Government. This still remains to be achieved. With such a structure, headed by a Rector and Deans of competence, vision, understanding, confidence and courage, many and indeed most, of the other problems would be on the way to solution to the extent that the problems of a university are ever solved. As it is, the University and those with any feeling of responsibility toward it can only grope.
- (2) Considerable progress has been made toward the completion of physical facilities which would make the reasonable operation of the University possible for many years to come, as far as physical facilities can make such operation possible. However, the progress actually made to date, and the lack of any sense of urgency toward the completion of the present building program, makes any estimate of a date for its completion unrealistic.
- (3) The creation of well-staffed Faculties is, of course, a sine qua non for the operation of a University. In Agriculture, a modest beginning has been made. However, the development of a Faculty for Agriculture needs aggressive leadership and strong support within the immediate future. The Faculty of Letters and Science is not in as good a position as that of Agriculture.
- (4) There are, of course, innumerable details, some quite important, which are worthy of mention. These must wait for satisfactory solution upon the creation of the administration referred to above and there seems no point in dwelling upon them here.
- (5) As far as I can judge, June 30, 1967, should be considered the termination date for our program with Ataturk University except for whatever is left over as of that date, on Participant programs, processing equipment, and getting our staff home. With proper planning, these can be held to a low point. In the meantime, however, the project should be supported at the levels outlined in our budget presentation through ICA/Education on 9 June 1961. If it develops that the program cannot be supported at the realistic level suggested in these budget proposals, then ICA and the University of Nebraska should re-examine the desirability of continuing the program.

In closing, I wish to express my appreciation for the generally cordial relations which we have had with ICA, with other American agencies in Turkey, and with the Turkish Government and University officials and employees, and with Turkish people generally.

We have also been fortunate in having the genuine interest and support of the program in Turkey from the Chancellor and the University generally. This we appreciate. We are especially indebted also to the work of the Turkish Program Office under the direction of the late Harry G. Gould and more recently of Jason S. Webster.